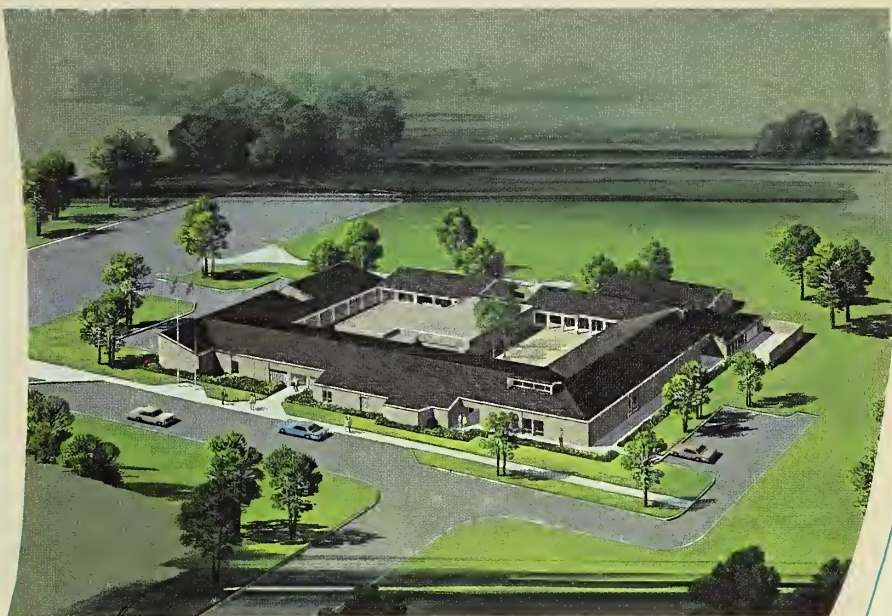




Established 1965

ROBESON TECHNICAL INSTITUTE CATALOG

1973-75





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ROBESON TECHNICAL INSTITUTE



**A UNIT OF THE DEPARTMENT
OF COMMUNITY COLLEGES**

GENERAL CATALOGUE

1973-1974

1974-1975

ROBESON TECHNICAL INSTITUTE

DRAWER A

LUMBERTON, N. C. 28358

TELEPHONE 919-738-7101

Robeson Technical Institute publishes this catalog for the purpose of providing students and other interested persons with information about the institute and its programs. The provisions of the catalog are not to be regarded as an irrevocable contract between student and R.T.I. The institute reserves the right to change any provisions, requirements or schedules at any time or to add or withdraw courses or program offerings.

Every effort will be made to minimize the inconvenience such changes might create for students.

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INSTITUTIONAL CALENDAR

1973-1974

FALL QUARTER

| | |
|------------------------------------|-------------------------------|
| September 4 (9 A.M.) | Freshman Orientation |
| September 5 (9 A.M.-12 Noon) | Freshman Registration |
| (1 P.M.-3 P.M.) | Senior Registration |
| September 6 | Classes Begin |
| October 4 | Field Day |
| October 8-12 | SGA Campaign Week |
| October 12 | SGA Election |
| October 18 | Installation SGA Officers |
| October 22 | Veterans Day Memorial Service |
| October 25 | Miss R. T. I. Finals |
| November 21 | End of Fall Quarter |
| November 22 & 23 | Thanksgiving Holidays |

WINTER QUARTER

| | |
|-----------------------------------|-----------------------|
| November 27 | Registration |
| November 28 | Classes Begin |
| December 15 | Christmas Dance |
| December 20-January 1, 1974 | Christmas Holidays |
| January 2 | Classes Resume |
| February 9 | Valentine Dance |
| February 14 | Fashion Show |
| February 26 | End of Winter Quarter |

SPRING QUARTER

| | |
|-------------------|--------------------------------------|
| March 1 | Registration |
| March 4 | Classes Begin |
| March 14 | Cap & Gown, Invitation, & Ring Order |
| April 12-15 | Easter Holidays |
| April 16 | Classes Resume |
| May 4 | Spring Dance |
| May 21 | End of Spring Quarter |

SUMMER QUARTER

| | |
|--------------------|------------------------|
| May 23 | Registration |
| May 24 | Classes Begin |
| May 27-29 | Instructors' Workshop |
| July 4 | Holiday |
| August 7 | End of Summer Quarter |
| August 8 | Commencement Practice |
| August 9 | Commencement Exercises |
| August 12-23 | Instructors' Vacation |

INSTITUTIONAL CALENDAR

1974-1975

FALL QUARTER

| | |
|------------------------------------|-------------------------------|
| September 3 (9 A.M.) | Freshman Orientation |
| September 4 (9 A.M.-12 Noon) | Freshman Registration |
| (1 P.M.-3 P.M.) | Senior Registration |
| September 5 | Classes Begin |
| October 3 | Field Day |
| October 7-11 | SGA Campaign Week |
| October 11 | SGA Election |
| October 17 | Installation of SGA Officers |
| October 24 | Miss R. T. I. Finals |
| October 28 | Veterans Day Memorial Service |
| November 20 | End of Fall Quarter |
| November 21 & 22 | Thanksgiving Holidays |

WINTER QUARTER

| | |
|-----------------------------------|-----------------------|
| November 26 | Registration |
| November 27 | Classes Begin |
| December 13 | Christmas Dance |
| December 19-January 1, 1975 | Christmas Holidays |
| January 2 | Classes Resume |
| February 14 | Valentine Dance |
| February 18 | Fashion Show |
| February 25 | End of Winter Quarter |

SPRING QUARTER

| | |
|-------------------------|--------------------------------------|
| February 28 | Registration |
| March 3 | Classes Begin |
| March 11 | Cap & Gown, Invitation, & Ring Order |
| March 28-March 31 | Easter Holidays |
| April 29 | Spring Dance or Field Day |
| May 20 | End of Spring Quarter |

SUMMER QUARTER

| | |
|---------------------------|-----------------------|
| May 22 | Registration |
| May 23 | Classes Begin |
| May 26-May 28 | Instructors' Workshop |
| | Student Holidays |
| May 29 | Classes Resume |
| July 4 | Holiday |
| August 6 | End of Summer Quarter |
| August 7 | Commencement Practice |
| August 8 | Commencement |
| August 11-August 22 | Instructors' Vacation |

ORGANIZATION

Department of Community Colleges

Ben E. Fountain, Jr. President

Board of Trustees

I. J. Williams Chairman
John L. Carter Vice-Chairman
R. Craig Allen Secretary

Appointed by Commissioners of Robeson County:

Expiration of Term

Gurney S. Kinlaw June 30, 1981
Vernon Floyd June 30, 1975
B. C. McBee June 30, 1979
J. A. Singleton, Jr. June 30, 1977

Appointed by Robeson County Board of Education:

Expiration of Term

John L. Carter June 30, 1981
A. D. Lewis, Jr. June 30, 1979
Guy P. McCormick June 30, 1977
I. J. Williams June 30, 1975

Appointed by Governor of North Carolina:

Expiration of Term

Gene Ballard June 30, 1979
John W. Oxendine June 30, 1975
Scott Shepherd June 30, 1977
Arnold Walker June 30, 1973

Administration

R. Craig Allen President
Ronald C. Brown Director of Admissions
Clifford Bullard MDTA Coordinator
Marcus Everitte Director, Library
Russell E. Hellekson Business Manager
George E. Howard Dean of Instruction
Judith A. Jones Counselor
Harmon Kivett Area Consultant
..... Director, Occupational Extension
R. Frank Leggett Director of Enrichment Education
Eddie M. Locklear Director, Veteran Affairs and Placement
Marie M. Malloy Counselor
T. Eugene Mercer Director, Basic Education
James W. Lawson Acting Director, Career Education
Frederick G. Williams, Jr. Dean of Student Services

Bookkeeping

| | |
|-----------------------|-------------------------|
| Rosa W. Cooper | Accountant |
| Lynne R. Parker | Assistant to Accountant |

Administrative Personnel

| | |
|-------------------------|-----------------------------------------|
| Osma N. Boone | Secretary, Continuing Education |
| Cathy Bracey | Receptionist/Switchboard Operator |
| Lola B. Bracey | Secretary, President |
| Carolyn Britt | Secretary, Library |
| Sarah C. Brown | Secretary, Faculty |
| Judy B. Conner | Secretary, Student Services |
| Joseph Couser | Maintenance |
| Virgie Currie | Maintenance |
| Cathy N. Fields | Secretary, Faculty |
| Mary P. Hughes | Secretary, Continuing Education |
| Boyd A. Humphrey | Supervisor, Maintenance |
| Howard Humphrey | Maintenance |
| Roy Humphrey | Maintenance |
| Prentis Lowry | Security Guard |
| Linda J. McCoy | Veteran Service Assistant |
| Carol Powers | Secretary, Business Manager |
| Nell Reising | Secretary, Continuing Education |
| Vickie J. Walters | Secretary, Student Services |
| Gayle L. Wilkes | Secretary, Director of Career Education |
| Juanita Worrell | Secretary, Dean of Instruction |

Faculty

| | |
|----------------------------|----------------------------------|
| Betty M. Biggs | Cosmetology |
| Joan Bissell | English |
| Sarah M. Britt | Business Education |
| William S. Brown | Mathematics and Science |
| Henry Bruce | Sewing Machines |
| William M. Bryan, Jr. | Welding |
| William E. Coleman | Electrical Installation |
| John D. Downs | Business Education |
| Roy Hedgpeth | Carpentry |
| Bonnie A. Hunt | English |
| Helen K. Ivey | Business Education |
| Eileen Jones | Cosmetology |
| Dr. Louis LaMotte | Related Subjects |
| Gary Locklear | Business Education |
| Silas M. McColl | Automotive Mechanics |
| Pauline H. McNair | Related Subjects |
| Eugene Madison | Electrical Installation |
| William S. Morris | Radio, TV, Electronics Servicing |
| Elizabeth T. Nye | Nursing Instructor |
| George Green Pope | Automotive Mechanics |

| | |
|-----------------------------|------------------------------------|
| Ann M. Revels | Business Education |
| Norman Rosser | Masonry |
| Betty K. Ruth | Preparatory Trade |
| Frances L. Scott | Preparatory Trade |
| Virginia B. Simkins | Related Subjects |
| Harold B. Thompson | Developmental Studies |
| Oliver R. Walters, Jr. | Business Education |
| Robert E. West | Mathematics |
| Grady A. Young | Air Conditioning and Refrigeration |

Learning Laboratory Personnel

| | |
|-----------------------------|--------------------------|
| Doris P. Bartley | Learning Lab Instructor |
| Hubert F. Bullard, Jr. | Learning Lab Coordinator |
| James C. Taylor | Learning Lab Instructor |



HISTORY

Robeson Technical Institute officially opened its doors on July 1, 1965, as an extension of Fayetteville Technical Institute, Fayetteville, North Carolina. The establishment of the school in the Barker-Ten Mile area of Robeson County marked the fulfillment of a long-felt need to provide post-secondary training at the technical and vocational levels.

In the fall of 1967, Robeson Technical Institute became an independent institution operated through a contractual arrangement with the Robeson County Board of Education. A local Board of Trustees was appointed and consisted of eight members, four appointed by the Robeson County Board of Education, and four appointed by the Robeson County Commissioners.

On July 1, 1971, through provisions of the North Carolina constitutional amendments as passed by the voters in the general elections in November of 1970, Robeson Technical Institute's legal status changed to a chartered institution. The number of trustees increased to twelve with the additional four members being appointed by the Governor.

The school, under the administration of the State Board of Education, Department of Community Colleges, is supported by public funds from local, state, and federal sources.

From the very beginning, R.T.I. began to fulfill its purpose of providing education at the adult level for all interested persons in Robeson County. It offered two full-time curriculum courses for high school graduates: Farm Machinery Mechanics, a one-year program leading to a diploma, and Secretarial Science, a two-year program leading to an associate degree.

During that first year, the Learning Laboratory, designed to provide educational opportunities to adults at their convenience and to meet their needs, came into existence. Also developed during the first year were extension courses for upgrading skills, for personal enrichment, and for improving basic education. Classes offering training to persons in new or expanding industries were begun. The school was assigned programs under the Manpower Development Training Act.

In succeeding years, the expansion of full-time and part-time programs required additions to the campus facilities and required the use of centers scattered over the county. Last year, over 5,000 adults participated in some form of educational programs at Robeson Tech.

In 1973, R.T.I. moved into a new facility, located north of Lumberton, at the intersection of Highways 301 and I-95. The site includes 70 acres of land, enough for present needs and expansion. A one-story brick structure (a complex of seven buildings) contains approximately 48,000 square feet and houses the library, offices, classrooms, laboratories, special skill areas, and student union.

The total investment for the new facility and the equipment approximates over one and one-half million dollars. Funds were secured from the Economic Development Administration, Coastal Plains Regional Commission, and Robeson County.

The completion of the new facility increases the implementation of new educational opportunities, and enhances the educational services offered the citizens of Robeson County.

GENERAL INFORMATION

Accreditation

Robeson Technical Institute is a tax supported, public, non-profit school. It is accredited by the North Carolina State Board of Education and is a candidate for accreditation with the Southern Association of Colleges and Schools. All programs offered by the Institute have been officially approved by the Veterans Administration and by the North Carolina Department of Vocational Rehabilitation. The Practical Nursing Program is fully approved by the North Carolina Board of Nursing.

Library

The Robeson Technical Institute Library is located near the student commons where it is convenient to all students. The Library has a growing collection of books and materials, most of which are related to the Degree and Diploma programs offered by the Institute. These are selected by a media specialist in consultation with faculty, students, and administrative personnel. In addition to the book collection, the Library subscribes to approximately 115 periodicals and 8 newspapers.

Audio-visual materials and equipment are housed in the Library. The Media Center is open to persons in business, industry, and the community for reference materials not found in other area libraries. All students and faculty members are encouraged to use the Library. The Library is open from 8:00 a.m. to 10:00 p.m., Monday — Thursday and 8:00 a.m. to 5:00 p.m. on Friday.



STUDENT SERVICES

Robeson Technical Institute provides many personnel services designed to make the educational experiences of its students profitable and satisfying. The Faculty and Administration recognize that the central purpose of the Institute is to provide an environment wherein each student may achieve maximum development—intellectually, socially, and physically. The services, organizations, and activities are provided as means of contributing to the total growth of the individual.

Counseling Service

Professionally trained counselors are available for vocational, academic, and personal counseling for both day and evening students. Students are encouraged to make use of this service at any time. A counselor is always available in the Student Services office.

Each full-time student has a faculty advisor. The advisor is the student's "anchor" or formal continuing contact with the institution during his stay at R.T.I. The advisor is available to discuss goals, academic problems, and specific course planning as the need arises. Advisors confer with each advisee a minimum of once each quarter in an effort to maintain appropriate progress throughout the year.

Testing Service

Each applicant is given a placement test battery which constitutes both an entrance requirement and a counseling tool for placement. These tests are given to all full-time applicants enrolling for the first time. Other testing services are available upon request. All testing is provided at no cost to students.

Financial Assistance

Information and applications for financial assistance can be secured from the Director of Admissions in Student Services.

Tutorial Program

Tutoring service is available for students who need special assistance. Students should contact their faculty advisor or the Student Services office for more information.

Placement Service

The Placement Service is designed to assist students and graduates in their search for either temporary or career job opportunities. A Student Services counselor maintains contact with employers who are looking for qualified applicants and schedules interviews on and off campus throughout the year. Students and alumni are encouraged to use this service as often as they wish.

Health Service

Robeson Technical Institute, a commuter institute with students residing at home, maintains no health facilities other than first aid equipment. The responsibility for medical services rests with the student and his parent or guardian.

Confidential records concerning the general health or physical disabilities of students are maintained in the Student Services office. Appropriate faculty members are informed in a confidential manner of special disabilities of students

with whom they come into contact when such information may be vital to the welfare of the student. Emergency facilities are available at Southeastern General Hospital, Lumberton, and a registered nurse is on the school campus or on call during the school day.

Orientation of Freshmen and Transfers

Orientation is planned to welcome entering students and to provide a smooth and successful adjustment to the school and its personnel. The program is designed to acquaint students with academic policies and co-curricular activities, with fellow students and the school facilities.

Student Handbook

A student handbook, issued at Orientation, is prepared by Student Services with the aid of interested faculty, staff, and Student Council members. The Handbook is a guide for students in acquainting them with practices and procedures of the Institute. Copies are on hand at all times in the Student Services office.

Student Records

Transcripts of the students' courses and grades are maintained in the office of the Director of Admissions. Transcripts are sent to agencies or institutions upon written request of the student.

Housing

The Institute does not operate dormitory facilities nor does it assume responsibility for housing. Upon request Student Services personnel assist students in locating adequate facilities in the vicinity. The Institute does not accept responsibility for student conduct or activities off the school campus except for school-sponsored activities.

Graduation

The Director of Admissions reviews records for each graduate to determine that all qualifications have been met. Among items checked are (1) required courses, (2) credit hours, (3) financial obligations to the Institute, and (4) library obligations. A minimum quality point average of 2.0 is required for diplomas and degrees.

Commencement exercises are held in August at the end of the fourth quarter. Caps and gowns and invitations are ordered in the spring. Class rings may be ordered in the spring and in the fall.

Taking an appropriate part in the graduation exercises is an expected requirement for receiving a diploma or degree from Robeson Technical Institute. All students are expected to wear the complete appropriate attire specified by the Institute unless otherwise approved by the Dean of Student Services. The \$10 graduation fee covers cost of the diploma, cap, and gown. Those students approved to graduate in absentia are not exempt from this fee.

Honors

The Dean's List and the President's List are published at the end of each quarter. All full-time students who have made all B's and above are on the Dean's List. Students who make straight A's for the quarter are on the President's List.

Graduates who have a cumulative average of 3.5 and above are recognized at Commencement as graduating with honors.

Marshals for Commencement Exercises are the seven first-year students in the two-year curriculum with the highest quality point averages at the end of the spring quarter. Of these seven, the one student with the highest average is chief marshal.

Awards

Appropriately inscribed plaques are presented at Commencement to the graduate with the highest average in the Associate Degree programs and to the graduate with the highest average in the one-year Diploma programs.

Certificates for membership in Who's Who Among Students in American Junior Colleges are awarded at Commencement. This honor is limited to students in the two year programs, and four or five students are usually cited each year.

A silver cup, sponsored by Robeson Office Supplies, is awarded the best all-round graduate in the business area. Each year names of winners are engraved on the cup, which is retained in the school. A small replica is given to the recipient of this award.

The Wall Street Journal Achievement Award is presented to the most outstanding business student, who is chosen by the faculty members in the Business Department.

Framed certificates, appropriately inscribed, are presented to those students who have shown exceptional service to Robeson Tech. Any graduate is eligible for this award. Additional awards made eligible to graduates may be announced as they become available.

STUDENT ACTIVITIES

Student Government

The Student Government Association is composed of all full-time students who are enrolled at Robeson Technical Institute and who pay the \$15 activity fee. Every SGA member is encouraged to be an active participant in student affairs and to voice opinions and thoughts through their organization.

Officers and representatives of the SGA are elected in October and provide leadership for the student body. The SGA sponsors athletic and social activities that enhance student campus life. Students are involved in school affairs, with active participation on various advisory and ad hoc committees. Representatives of the SGA usually attend state conferences of the student government organization in the Community College System.

A budget governing the student activity fee for the following school year is recommended by the SGA in the spring. The budget usually covers the school newspaper, annual, special projects, student insurance, socials and dances, school pictures, and ID cards.

Dances

Several dances under the sponsorship of the SGA are held each year, depending on the wishes of the students. A portion of the activity fee is budgeted to cover costs.

Field Day

Student services sponsors a Field Day in the early fall. Competitive outdoor activities and sports and a cook-out are arranged.

Annual

The annual, *The Directions*, gives a pictorial view of the students and their activities of the year. Any SGA member is eligible for participation on the year-book staff.

Newspaper

The R.T.I. Echo, the student newspaper, is published quarterly and provides notice of significant developments and achievements related to the students and their activities of the year. Staff members are chosen from volunteers from the SGA.

Athletics

In the past R.T.I. has had basketball and softball teams playing in the local league. These and other sports may be organized upon request of a sufficient number of students. The R.T.I. campus has acquired room for expansion and is adding those activities requested that are within budgetary limits and school policy.

Miss R.T.I. Pageant

The Miss R.T.I. Pageant is held each fall. The winner is the school representative at functions and parades during her reign. Contestants are judged on beauty, talent, and poise.

Special Events

The Student Government may sponsor other activities such as socials, films, speakers, and related activities that are of interest to the students. When such occasions arise, students are notified in advance and are encouraged to participate.

Clubs

The Student Government sponsors formation of clubs according to student interest. Information may be secured from Student Services or president of the SGA.

School Colors

The official colors of Robeson Technical Institute are royal blue and white.



Admissions

Robeson Technical Institute maintains an “open door” policy for all applicants who are high school graduates or who have reached their eighteenth birthday. The Institute serves all students regardless of race, color, creed, sex, or national origin. All prospective students may be admitted to the different curricula based upon individual preparation and readiness.

ADMISSION REQUIREMENTS—CAREER EDUCATION PROGRAMS

Full-time Students

Two-year programs for Associate of Applied Science Degree

1. High school graduate or the equivalent
2. Application
3. Transcript of previous education
4. Completion of standardized test battery
5. Complete medical history form
6. Counseling interview, where applicable

One-year programs for Diploma and Certificate Programs

1. Eighteen years of age or older and the ability to profit from instruction
2. Application
3. Transcript of previous education
4. Completion of standardized test battery
5. Complete medical history form
6. Counseling interview, where applicable
7. Additional requirements for Practical Nursing
 - a. High school graduate or the equivalent
 - b. Medical examination by a physician
 - c. Interview with, and approval of, nursing department supervisors
 - d. Two character reference letters
 - e. Proof of recent inoculations for tetanus
8. Additional requirements for Cosmetology
 - a. High school graduate or the equivalent
 - b. Medical examination by a physician within 30 days prior to registration
 - c. Serological lab test, tuberculin skin test, or chest x-ray within 30 days prior to registration

The following procedures will be followed for registering full-time students.

1. Complete application form
2. Provide transcript of previous education
3. Complete medical history form
4. Complete standardized test battery
5. Provide any additional requirements for specific course
6. Personal reference letter for transfer students
7. Counseling interview where applicable
8. Review by admissions officer
9. Further counseling, if necessary
10. Letter of acceptance to specific course
11. Notification of day and time to report for registration

Part-time Students

Adult students may be admitted under special provision which allows them to take up to ten quarter hours of credit courses before completing admission requirements. However, all admission requirements must be met by the time the student has completed ten quarter hours of work if credit is to be granted.

Students who do not earn a "C" or better average on the first ten credit hours attempted will be referred to a counselor for consultation before registering for additional courses.

The following procedures will be followed for registering part-time students.

1. Complete application
2. Provide high school transcript from post-secondary institution, if attended
3. Register for courses
4. Pay tuition
5. Admit as special student

Credit By Transfer

Robeson Technical Institute may accept credits earned from technical institutes and colleges. Only course grades of "C" or better will be accepted and such courses must parallel the content of R.T.I. courses. Students who wish to transfer from other colleges and technical institutes must be eligible to return to the institution last attended.

The Director of Admissions will evaluate transcripts of previous education to determine the transfer credit allowable. This evaluation will be made at the time of acceptance and the student and his advisor notified in writing accordingly. Transfer credits will be posted to the student's permanent record as soon as the student enrolls.

A personal reference letter from the former post-secondary school will be required for transfer acceptance.

Credit By Examination

Any student, with the recommendation of a counselor and an advisor, may apply for credit for any curriculum credit course offered by R.T.I. Proficiency examinations will be required for each course.

All credits received via examination will be posted on the student's permanent record, with the examination grade and the statement "credit by examination." Re-examination for the same course is prohibited.

SPECIAL CONDITIONS

Any person who has been convicted of violation of, or has been known to violate, the North Carolina Uniform Narcotic Drug Act as a pusher (seller) or user of drugs listed as illegal shall not be admitted to Robeson Technical Institute, except with the permission of the Board of Trustees of the Robeson Technical Institute.

Any person who has been indicted for violation of the North Carolina Uniform Narcotic Drug Act, or for which there is good reason to believe that the person has violated the N. C. Uniform Narcotic Drug Act, will have his application for admission to Robeson Technical Institute held in abeyance until such time as his case is cleared in a court of law, or his name can be cleared through ample evidence supplied or the applicant or his representative.

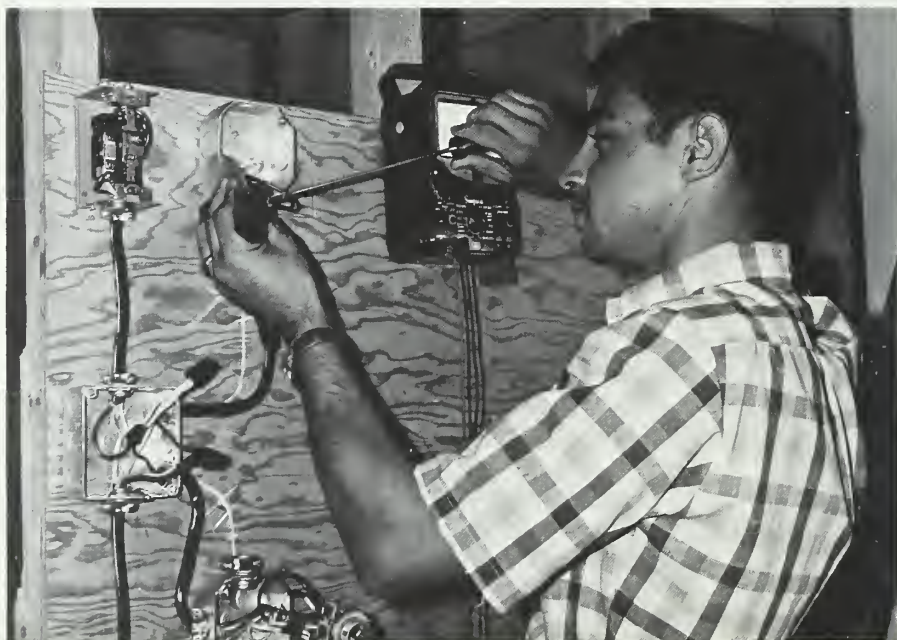
CONTINUING EDUCATION

(Adult Basic, High School, Adult Enrichment, Occupational Extension)

The "open door" policy is observed regarding requirements for admission to Continuing Education classes. Any person who is a high school graduate, or at least 18 years of age and not currently attending a public school, is eligible to enroll.

Additional Requirements—High School Program

1. For admission to the Adult High School Diploma Program, a person must be at least 18 years of age and out of public schools for at least six months. Upon written recommendation of the local school superintendent, individual public school dropouts between the ages of 16 and 18 may be admitted as students with special needs.
2. The entrance level of each student applying for admission to the Adult High School Diploma Program shall be determined in one of the following manners:
 - a. The procedure shall be to apply the scores on any appropriate achievement battery approved under the National Defense Education Act, Title V (a) Testing, North Carolina, to the 50th percentile level for end-of-year norms to determine entrance level. Thus, an applicant with a percentile rank of 50 on English for eleventh grade end-of-year norms would be classified as a senior in English for course-of-study purposes; and so on for other subject fields.
 - b. A certified transcript from a state or regionally accredited secondary school showing courses and years of work completed.



REGISTRATION

Students are expected to register for course work on the day specified each quarter in the school calendar. Formal registration for all curriculum courses is officially closed at the end of the fifth day of regular classes.

Residence Status for Tuition Payments

To qualify for in-state tuition, a legal resident must have maintained his home in North Carolina for at least twelve months prior to enrollment. The legal residence of a minor is that of his parents, surviving parent, or legal guardian. No person loses in-state resident status by serving in the Armed Forces outside of the state of North Carolina. The residence status of any student is determined at the time of his first enrollment.

Any student in doubt concerning his residence status must bear the responsibility for securing a ruling by stating his case in writing to the Business Manager. The student whose residence status changes while a student has the responsibility of informing the Business Manager immediately. Failure to give complete and correct information regarding residence constitutes grounds for disciplinary action.

EXPENSES

Robeson Technical Institute receives financial support from local, state, and federal sources, allowing each student an educational opportunity at minimum cost. Tuition fees are set by the State Board of Education and are subject to change without notice. The payment of fees for each quarter is required at registration.

Tuition

| | In-State | Out-of-State |
|--------------------------------------|----------|--------------|
| 13 quarter hours or more (full-time) | \$32.00 | \$137.50 |
| Part-time students per quarter hour | \$2.50 | \$11.45 |

Activity Fee

A fee of \$15 per year is charged each regular curriculum student who will be enrolled in at least 13 credit hours of classes. This fee is for student activities and includes the cost of student insurance, school pictures, the student newspaper and annual, dances, social events and other activities. Those students taking less than 13 credit hours of classes are not required to pay an activity fee but must pay for services included in the activity fee if they wish to participate.

The Activity Fee is paid when registering for the first quarter of attendance for the year.

Breakage Fee

Breakage, damage, or loss due to negligence, carelessness, or other mishandling of school supplies, material, or equipment by students is the responsibility of such students. They will be required to pay for such items and may be subject to disciplinary action.

Graduation Fee

A graduation fee of \$10 is paid when registering for the last quarter of enrollment prior to Commencement Exercises. This fee covers cost of cap and gown and diploma.

Textbooks

Students are responsible for obtaining the required textbooks and supplies. A bookstore on the Robeson Technical Institute campus is maintained from which students may purchase the necessary books and supplies.

Student Insurance

A group policy providing insurance protection is maintained in effect by the Institute. The cost is covered from the Activity Fee for all full-time students, the payment of which has been approved by the Student Government Association.

It is in the best interest of all students to provide some measure of insurance protection. Those who do not pay the \$15 activity fee may purchase this accident insurance for \$3.50 per year.

Late Registration Fee

A late registration fee of \$5 may be charged curriculum students who register after the announced registration day.

Refund Policy

Refunds for full-time students shall be made only if the student is, in the judgment of the institution, compelled to withdraw from school for unavoidable reasons. In such cases two-thirds of the tuition may be refunded if a student withdraws within the first ten calendar days of the quarter. In cases where courses or curricula fail to materialize, all of the student's tuition shall be refunded.

The State Board has authorized modification of the tuition refund policy so that veterans or war orphans receiving benefits under U. S. Code, Title 38, Chapters 33 and 35, can be refunded the pro rata portion of the tuition fee not used at the time of withdrawal of such students.

Business Office

The payment of fees, sale of books, supplies, and materials, receipt of loans, and the payment of refunds are major responsibilities of the Business Office. Office hours are 8:30 a.m. to 5 p.m. Monday through Friday.

FINANCIAL ASSISTANCE

Student financial aid is provided on the basis of need. No award is made until a student has completed all of the admission requirements and has been accepted for enrollment.

The Financial Aid Committee is composed of two representatives from the staff and faculty, and one representative from the Business Office. The committee meets periodically, beginning in the early spring, to consider requests and to make awards.

Students who encounter financial difficulty at any time during the year should confer with the Financial Aid Officer in Student Services.

Types of Aid

VOCATIONAL REHABILITATION AID

By the act of the United States Congress, any physically handicapped student may be eligible for financial aid and for scholarship assistance. If a

prospective student has any physical limitation, the student may contact the nearest office of the N. C. Vocational Rehabilitation, or make his request through the office of Student Services.

VETERANS AND WAR ORPHANS

All curriculum programs offered by Robeson Technical Institute are approved by the Veterans Administration for enrollment by veterans and/or war orphans under Chapter 35, Title 38, United States Code. Interested persons should contact their nearest Veterans Service Office or the Student Services Office at Robeson Technical Institute for further information.

COLLEGE WORK-STUDY

Under this federally-funded program students may be employed on a part-time basis by the Institute. To be eligible, an applicant must be a high school graduate and less than 21 years of age and must need the earnings to begin or continue training on a full-time basis. The jobs may be on campus, or off campus with non-profit agencies or organizations.

SOCIAL SECURITY

Benefits may be paid for students under 22 years of age who have one or more deceased parents that were covered by Social Security. Contact the nearest Social Security office for further information.

COLLEGE FOUNDATION

As a private non-profit corporation providing educational loans to North Carolina residents, the foundation administers the Bryan College Foundation monies. Students may borrow up to \$1500 which is secured by a promissory note. The U. S. Office of Education pays the 7% interest during full-time enrollment and for the nine months grace period.



ROBESON TECHNICAL INSTITUTE STUDENT AID FUND

The Student Aid Fund is supported by donations from local business and industrial firms, church and civic groups, and several interested individuals. Current donors to the Student Aid Fund are:

Acme Electric Corporation
Alamac Division of West Point Pepperell
Alpha Cellulose Corporation
Belk-Hensdale Company
Beta Pi Chapter of Alpha Delta Kappa
Blackmon Furniture Company
Carolina Auto Supply
Christian Relations Committee of Chestnut Street United Methodist Church
City Homemakers Club of Lumberton
Civinette Club of Lumberton
Civitan Club of Lumberton
D. E. Ward, Jr., M.D.
Dean's Pharmacy of Lumberton
Elks Club of Lumberton
F.C.X. Grain Marketing Service
Farm Bureau Insurance Services
Federal Land Bank Association of Lumberton
First Union National Bank of North Carolina at Lumberton
First Union National Bank of North Carolina at Red Springs
Freeman Motor Company
Hedgpeth Pharmacy, Incorporated
Henderson Manufacturing Company
Home Federal Savings and Loan Association of Fayetteville
Jaycees of Fairmont
Jaycees of Lumberton
Jay-C-Ettes of Pembroke
Jaycees of St. Pauls
J. C. Noble Realty, Incorporated
J. C. Penney Company, Incorporated
Joe Sugar of St. Pauls
Jon-San Chevrolet, Incorporated
Kendall Manufacturing Company
Kiwanis Club of Lumberton
K. M. Biggs, Incorporated
Lady Lions Club of Lumberton
Lions Club of St. Pauls
Lumbee Production Credit Association
Lumberton Business and Professional Women's Club
Lumberton Coca-Cola Bottling Company—A division of Fayetteville Coca Cola Bottling Company
Lumberton Ice and Fuel Company
Lumberton Implement Company
Lumberton Junior Service League
Lumberton Tobacco Board of Trade
Lumberton Trading Company, Incorporated
Manning Fabrics, Incorporated

Mary's Flower House of Lumberton
Medical Auxiliary of Robeson County
M. H. McLean Wholesale Grocery, Incorporated
Mr. Berry Godwin French
Mr. Cecil L. Thompson
Mr. Charles David McNeill
Mr. Charles E. Warwick
Mr. W. D. Linkhaw
Mr. and Mrs. John F. Greene
Mrs. E. L. Bowman
Mrs. H. S. Minges
Mrs. Loleta O. Norment
Mrs. Tom J. Smith
Pate's Supply Company of Pembroke
Pembroke Manufacturing Company
Pepsi-Cola Bottling Company of Lumberton
Protective Agency, Incorporated
Red Springs Motors, Incorporated
Robeson County Bar Association
Robeson County Cold Storage, Incorporated
Robeson County Farm Bureau, Incorporated
Rotary Club of Lumberton
Robeson Office Supplies
Robeson Savings and Loan Association
Sammy's Auto Sales
Scarborough Builders Supply Company
Smith's Refrigeration, Incorporated
Southern National Bank of North Carolina
St. Pauls Junior Chamber of Commerce
The Osterneck Company
Trinity Episcopal Church Women
Vel-Cord Southern Corporation
Waccamaw Bank and Trust Company
West's Carpet Service
Williamson Volkswagen, Incorporated
Woman's Club of Lumberton
Faculty and Staff of Robeson Technical Institute

Requests for Financial Aid

Requests for financial assistance should be directed to the office of Student Services. Write or call:

Financial Aid Officer
Robeson Technical Institute
Drawer A
Lumberton, N. C. 28358
Telephone: 919-738-7101

GENERAL STUDENT REGULATIONS

It is expected that at all times the student will conduct himself as any responsible adult in a public place. Therefore, students are accountable for observance of all regulations and policies established at Robeson Technical Institute. Students are made aware of the policy governing student conduct, which includes procedures for dealing with alleged violations. Examples of conduct that is not tolerated are destruction of school property, possession of dangerous weapons, possession or use of alcoholic beverages or other drugs. Policies are given in detail in the Student Handbook. Copies of the complete rules and regulations, with procedures for hearings and appeals, are available in the office of Student Services.

ACADEMIC INFORMATION

Quarter System

Robeson Technical Institute is on a quarter schedule. The fall, winter, spring, and summer quarters are each approximately eleven school weeks in length. The Institute is in session five days a week.

Class Schedule

All classes, full-time, part-time, and non-credit courses, are scheduled between the hours of 8:30 a.m. and 10:00 p.m. Monday through Thursday, and 8:30 a.m. to 5:00 p.m. on Friday. Normally classes for full-time students are scheduled between 8:30 a.m. and 4:00 p.m.

Contact Hours

The contact hours shown in the catalog are minimal. The policy of the institution permits students to enroll in additional subjects and laboratory work beyond those shown in the catalog.

When in any quarter the total weekly contact hours listed are fewer than twenty-five hours in a degree program and fewer than thirty hours in a diploma program, a student may request additional instructional hours.

Credit Hours

Quarter hours of credit are awarded as follows: one quarter hour of credit for each hour per week of class work, one quarter hour of credit for each two hours per week of lab work, and one quarter hour of credit for every three hours of shop work.

Grading System

The 4.00 quality point system is used to calculate student grade averages.

| Letter Grade | Meaning | Quality Points |
|--------------|--------------------------------------------------------------------------------------------------------|-----------------|
| | | Per Credit Hour |
| A | Excellent | 4 |
| B | Good | 3 |
| C | Average | 2 |
| D | Poor, but passing | 1 |
| F | Failure | 0 |
| WP | Withdraw passing | 0 |
| WF | Withdraw failing | 0 |
| I | Incomplete, work must be completed within 6 weeks of next quarter; otherwise, F will be recorded | 0 |
| AU | Audit; enrollment as a special or noncredit student | 0 |

EXAMPLE OF COMPUTING QUALITY POINTS EARNED

| Course | Hours Credit | Grade | Quality Points Per Credit Hour | Grade Points Earned |
|----------|-----------------|-------|-----------------------------------|------------------------|
| ENG 1101 | 3 | C | 2 | 6 |
| PME 1101 | 7 | B | 3 | 21 |
| MAT 1101 | 5 | A | 4 | 20 |
| PHY 1101 | 4 | F | 0 | 0 |
| DFT 1101 | 1 | D | 1 | 1 |
| | <u>20</u> | | | <u>48</u> |

The quality point average is completed by dividing grade points earned by the total credit hours. In the case above, it would be $48 \div 20 = 2.40$ quality point average. All grades A through F are counted in computing the quality point standing. Credit by transfer and credit by examination are not included in computing the quality point standing.

Students may remove academic deficiencies by successfully repeating necessary courses. When a course is repeated, only the grade on the last course attempt is used in computing the student's quality point standing.

Attendance Policy

The Institute has no set number of authorized class absences. Absences are a serious deterrent to good scholarship and it is virtually impossible to receive optimum instruction, obtain knowledge, or gain skills when absent. All students are adults with many responsibilities, and an occasional absence might be absolutely necessary; however, such absences in no way lessen the student's responsibility for meeting the requirements of the course. Explanation for an absence will not be demanded, but as a matter of courtesy the reason for it should be given to the instructor.

Students who can anticipate absences should, if possible, contact their instructor prior to the absence. Should this be impossible, the student should see the instructor as soon after the absence as possible to explain his absence and make up work. Make-up work will be allowed at the discretion of the instructor.

Warning notices for unexcused absences will be sent to parents or guardians of students when in the judgment of the instructor absences are adversely affecting satisfactory progress in class. Additional unexcused absences from class

may result in the student's failing the course and becoming ineligible to register for subsequent courses.

Grade Reports

Grade slips will be mailed to students at the close of each quarter.

Withdrawal

A student withdrawing from school during the academic year should complete the withdrawal form in the Registrar's office. Official withdrawal by the student will protect the student's scholastic record, his rights to re-enroll and to transfer credit, and his right to receive an annual.

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ASSOCIATE DEGREE IN GENERAL EDUCATION



GENERAL EDUCATION PROGRAM

The Associate Degree General Education Program is essentially a two-year residential program in which a student may complete all work toward an associate degree. Courses included in the General Education curriculum are those which are usually the entire requirements of the freshman and sophomore program in four-year colleges of arts and sciences (exclusive of foreign language requirements required by some colleges).

The Associate Degree in General Education program is designed primarily for young and/or working adults who wish to begin work toward a college degree or to continue a degree program interrupted at an earlier date. In addition, working adults who want to explore a subject for their own enrichment and pleasure may enroll as special students (i.e., not seeking a degree). Students may elect to take only one course each quarter during the day or evening through the General Education Program.

Classes are scheduled twice weekly at night, as well as during the day, so that employed persons may attend conveniently. Courses offered are the same high quality as those offered in four-year colleges. Students are expected to maintain the highest scholastic standards possible. Each General Education Program student is offered special assistance in planning his educational program and in relating his program to his personal goals. Advisors are assigned to each student at the time of registration.

Some graduates may elect to pursue a higher academic degree at the completion of the work for an Associate Degree.

Fayetteville State University and Campbell College have agreed to accept all required courses in this program toward fulfillment of their baccalaureate requirements. Pembroke State University will accept the first year's work toward fulfillment of their baccalaureate requirements.

Elective courses outlined in this program will be accepted as electives at the gaining institution. However, individual major requirements at the gaining institutions must be completed.

Graduates of the Associate Degree program in General Education will be admitted to Fayetteville State University without loss of credit as juniors in classification. Students completing one year will be admitted to Pembroke as sophomores in classification.

Students who attempt to transfer before graduation from Robeson Technical Institute will not be covered by the transfer agreements with senior institutions, but will be evaluated on an individual basis.

ASSOCIATE DEGREE IN GENERAL EDUCATION

| | | | <i>Class Hours</i> | <i>Lab Hours</i> | <i>Credit Hours</i> |
|-----------------------|-----|------------------------------|------------------------|----------------------|-------------------------|
| FALL QUARTER | | | | | |
| ENG | 105 | Grammar and Composition | 5 | 0 | 5 |
| MAT | 110 | Fundamentals of College Math | 5 | 0 | 5 |
| PSY | 101 | Introduction to Psychology | 5 | 0 | 5 |
| HIS | 105 | American History | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 20 | 0 | 20 |
| WINTER QUARTER | | | | | |
| ENG | 106 | Grammar and Composition | 5 | 0 | 5 |
| MAT | 111 | Fundamentals of College Math | 5 | 0 | 5 |
| ENG | 204 | Fundamentals of Speech | 5 | 0 | 5 |
| HIS | 106 | American History | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 20 | 0 | 20 |

| | | | <i>Class Hours</i> | <i>Lab Hours</i> | <i>Credit Hours</i> |
|--------------------------------------|-----|-------------------------------|------------------------|----------------------|-------------------------|
| SPRING QUARTER | | | | | |
| ART | 101 | Art Appreciation | 5 | 0 | 5 |
| PHI | 101 | Introduction to Philosophy | 5 | 0 | 5 |
| ENG | 108 | American Literature | 5 | 0 | 5 |
| | | *Elective | | | <u>3</u> |
| | | | | | 18 |
| FALL QUARTER | | | | | |
| BIO | 101 | Biology (or PHY 101, Physics) | 3 | 2 | 4 |
| MUS | 101 | Music Appreciation | 5 | 0 | 5 |
| ENG | 109 | American Literature | 5 | 0 | 5 |
| | | *Elective | | | <u>3</u> |
| | | | | | 17 |
| WINTER QUARTER | | | | | |
| BIO | 102 | Biology (or PHY 102, Physics) | 3 | 2 | 4 |
| SOC | 201 | Principles of Sociology | 5 | 0 | 5 |
| ECO | 102 | Economics | 5 | 0 | 5 |
| POL | 201 | American Government | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 18 | 2 | 19 |
| SPRING QUARTER | | | | | |
| | | *Electives | | | <u>16</u> |
| Total Credit Hours = <u>96 - 110</u> | | | | | |

| <u>*Electives</u> | | | Credit Hours |
|-------------------|-------------|----------------------------------------|--------------|
| BIO | 101-102 | Biology | 4-4 |
| PHY | 101-102 | Physics | 4-4 |
| BUS | 101 | Introduction to Business | 5 |
| BUS | 120-121-122 | Accounting | 4-4-4 |
| BUS | 102-103 | Typewriting | 3-3 |
| BUS | 115-116 | Business Law | 5-5 |
| MAT | 101-102 | Technical Mathematics | 5-5 |
| HIS | 110 | The Black Man and Contemporary Society | 5 |
| HIS | 120 | History of the American Indian | 5 |
| HEA | 201 | Personal Health and First Aid | 5 |
| SOC | 202 | Marriage and the Family | 5 |
| BUS | 106-107-108 | Shorthand | 4-4-4 |

COURSE DESCRIPTIONS

Credit Hours

ART 101 Art Appreciation 5

A course to establish an understanding of art, to develop an appreciation for the relationship between art and man, and to study art in a cultural environment.

BIO 101-102 Biology 4-4

Modern concepts of biological principles: cell structure and reproduction, metabolism, genetics, and ecology. Three lecture and two laboratory hours each week.

BUS 101 Introduction to Business 5

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management.

BUS 102 Typewriting 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103 Typewriting 3

Designed to improve speed and accuracy with continued emphasis on subjects taught in BUS 102.

Prerequisite: BUS 102.

BUS 106 Shorthand 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107 Shorthand 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108 Shorthand 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

BUS 115 Business Law 5

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116 Business Law 5

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights.

Prerequisite: BUS 115.

BUS 120 Accounting 4

Principles, techniques, and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 Accounting 4

Continuation of accounting principles learned in BUS 120 with detailed emphasis on notes, deferrals, accruals. Includes a study of current and fixed assets with special attention to receivables, inventory, and plant assets.

Prerequisite: BUS 120.

BUS 122 Accounting 4

Partnership and corporation accounting including a study of payrolls, federal, and state taxes. Emphasis is placed on the recording, summarizing, and in-

terpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

Prerequisite: BUS 121.

ECO 102 Economics 5

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

ENG 105-106 Grammar and Composition 5-5

An integrated study and practice of the language skills—reading, writing, speaking, and listening. A detailed study of the main types of composition including exposition, argumentation, description, and narration. Literary analysis and style are studied and the writing of a research paper is required. Courses must be taken in sequence.

ENG 108-109 American Literature 5-5

A survey of the major writers of America from colonial days to the present.

ENG 204 Fundamentals of Speech 5

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews.

HEA 201 Personal Health and First Aid 5

Major health problems and how they relate to individuals; principles and applied techniques of first aid are studied.

HIS 105-106 American History 5-5

A study beginning with the colonization of colonial America and continuing to the present time. The first course (HIS 105) ends at the close of the Civil War. HIS 106 begins with during the reconstruction era and continues to the present.

HIS 110 The Black Man and Contemporary Society 5

This course is an intensive study of the Afro-American from his African and European backgrounds through colonial America to the present. Special attention will be given to the effect of slavery, segregation, and racism on the personality and destiny of the Afro-American. The course will also emphasize Afro-American's contributions, slave revolts, and the contemporary civil, social, and cultural movements.

HIS 120 History of the American Indian 5

A survey of the major Indian cultures in North America with emphasis on those

located in the eastern half of the United States.

MAT 101 Technical Mathematics 5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

MAT 102 Technical Mathematics 5

A continuation of MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions, the binomial expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth.

Prerequisite: MAT 101.

MAT 110-111 Fundamentals of College Math 5-5

The study of axiomatic use of basic mathematical concepts in the development of the real and complex number systems; algebraic and trigonometric functions with emphasis on fundamentals of applications are studied.

MUS 101 Music Appreciation 5

A course designed to instill and to further the development of knowledge, understanding, and the appreciation of good music. Emphasis given to the historical development of music, pertinent criticism, forms of music, listening, and the relationship of music to a general cultural development.

PHI 101 Introduction to Philosophy 5

An introductory course designed to give a philosophical perspective to the nature of and the scope of questions arising in the ever-changing yet constant areas of life and the problems and the philosophical answers which guide men's lives.

PHY 101-102 Physics 4-4

A survey of the basic principles of physics and of their uses and consequences in our world. The development and interpretation of experiments in physics will be studied and elementary laboratory experiments will be performed.

POL 201 American Government 5

American national government with emphasis on basic concepts, structure, powers, procedures, and problems.

PSY 101 Introduction to Psychology 5

An introduction to the field of psychology with emphasis upon intelligence, personality, learning, and motivation.

SOC 201 Principles of Sociology 5

An introductory course designed to impart to the student a knowledge of himself in social context. Interrelationships in such areas as personality, society,

and culture are examined. The student is familiarized with major social processes and institutional functions.

SOC 202 Marriage and the Family

5

A course designed to provide understanding of family relationships for those unmarried, those contemplating marriage, those married, and prospective counselors of all of them; a functional approach to the interpersonal relationships of courtship, marriage, and family life.



ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAMS



ACCOUNTING

INTRODUCTION

Accounting is one of the fastest growing employment fields in America today, and the job outlook for good accountants seems bright for many years to come. These opportunities result from the tremendous business and industrial expansion in all parts of the country. Because of this emphasis, there is a growing need for trained personnel in the area of accounting to help managers keep track of a firm's operation.

PURPOSE

The Accounting curriculum is designed to fill this need for accountants by offering students the detailed accounting theories and practical skills for entry into the accounting profession.

The objectives of the Accounting curriculum are to develop the following competencies:

1. Understanding of the detail fundamentals of accounting and analysis of the financial statements and auditing;
2. Understanding of the principles of organization and management in business operations, business law, and taxes;
3. Understanding and skill in effective communications for business.

JOB DESCRIPTION

The duties and responsibilities of an accountant vary somewhat in different firms. These may include: recording transactions, rendering periodic reports, maintaining cost records, making special reports, completing tax returns, auditing the books, and advising management in areas of financial affairs.

Graduates of the Accounting curriculum will qualify for various jobs in business and industry leading to any of the following accounting positions: accounting clerk, payroll clerk, accounting machine operator, auditor, and cost accountant. This training plus further experience should prepare graduates to become office managers, accounting supervisors, and to fill other responsible positions in a business firm.

ACCOUNTING

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|--------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| BUS | 120 | Accounting | 3 | 2 | 4 |
| MAT | 110 | Business Mathematics | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 20 | 5 | 22 |
| WINTER QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ECO | 102 | Economics | 5 | 0 | 5 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| BUS | 121 | Accounting | <u>3</u> | <u>2</u> | <u>4</u> |
| | | | 18 | 5 | 20 |

Hours Per Week *Quarter*
Class *Lab* *Hours*
Credit

SPRING QUARTER

| | | | | | |
|-----|-----|------------------|----|---|----|
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ECO | 104 | Economics | 3 | 0 | 3 |
| BUS | 116 | Business Law | 5 | 0 | 5 |
| BUS | 122 | Accounting | 3 | 2 | 4 |
| BUS | 123 | Business Finance | 5 | 0 | 5 |
| | | | 19 | 2 | 20 |

FALL QUARTER

| | | | | | |
|-----|-----|---------------------------------|----|---|----|
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 3 | 3 |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| BUS | 222 | Intermediate Accounting | 3 | 2 | 4 |
| BUS | 235 | Business Management | 5 | 0 | 5 |
| | | | 16 | 7 | 19 |

WINTER QUARTER

| | | | | | |
|-----|-----|-------------------------|----|---|----|
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| BUS | 211 | Office Machines | 2 | 3 | 3 |
| BUS | 223 | Intermediate Accounting | 3 | 2 | 4 |
| BUS | 229 | Taxes | 3 | 2 | 4 |
| BUS | 271 | Office Management | 3 | 0 | 3 |
| | | | 14 | 9 | 18 |

SPRING QUARTER

| | | | | | |
|-----|-----|--------------------|----|---|----|
| SSC | 201 | Social Science | 3 | 0 | 3 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| BUS | 225 | Cost Accounting | 3 | 2 | 4 |
| BUS | 269 | Auditing | 3 | 2 | 4 |
| BUS | 247 | Business Insurance | 5 | 0 | 5 |
| | | | 17 | 4 | 19 |

AGRICULTURAL BUSINESS TECHNOLOGY

INTRODUCTION

Rapid technological changes in farming and related agricultural businesses have given rise to the need for more technically educated people. Various agricultural businesses and industries employ persons to assist in marketing, processing, and distributing of farm products and providing services to the farmer. Many responsible positions in agricultural businesses and industries require technical education not available in high schools or in four-year colleges. The trends are to larger, highly mechanized and specialized farms with huge capital investments. This means that there will be an increasing demand for capable farm managers to coordinate the purchasing, production, and marketing of these larger agricultural production operations.

Farm managers of the future must possess greater technical competence to remain in the highly competitive production phase of agriculture. They must be able to cope with present production problems and adapt to rapid technological changes.

PURPOSE

The Agricultural Business Technology curriculum is designed to help students acquire knowledge, understandings, and abilities in the broad field of

agricultural business — including agricultural production. It combines knowledge of agriculture with business education to prepare the graduate for many of the varied employment opportunities in agribusiness. General objectives of this curriculum are to develop the following student competencies:

1. Understanding of the principles of organization and management in agricultural businesses and industries;
2. Understanding of the application of the principles of business management to agricultural production, and the abilities essential to the management of an efficient, well-organized farming operation;
3. Understanding of the basic principles of our economic system, marketing, credit, price concepts and governmental policies, and programs relating to agriculture; and
4. Understanding of the agricultural sciences most essential to the production and marketing of agricultural products — including knowledge of the animal, plant, and soil sciences and their relationships with ability to apply these educational experiences to practical problems of agricultural business and industry.

AGRICULTURAL BUSINESS TECHNOLOGY

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|-----|----------------------------------------|-----------------------|-------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| MAT | 110 | Business Mathematics | 5 | 0 | 5 |
| AGR | 125 | Animal Science | 3 | 4 | 5 |
| BUS | 102 | Typewriting—(Elective) | 2 | 3 | 3 |
| | | | <u>*16/18</u> | <u>*4/7</u> | <u>*18/21</u> |
| WINTER QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| AGR | 104 | Introduction to Agricultural Economics | 3 | 0 | 3 |
| CHM | 101 | Chemistry | 3 | 4 | 5 |
| AGR | 228 | Livestock Diseases & Parasites | 3 | 4 | 5 |
| BUS | 120 | Accounting | 3 | 2 | 4 |
| | | | <u>15</u> | <u>10</u> | <u>20</u> |
| SPRING QUARTER | | | | | |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| BUS | 121 | Accounting | 3 | 2 | 4 |
| AGR | 226 | Swine Production | 3 | 2 | 4 |
| AGR | 201 | Agricultural Chemicals | 3 | 2 | 4 |
| | | | <u>12</u> | <u>6</u> | <u>15</u> |
| SUMMER QUARTER | | | | | |
| AGR | 218 | Agricultural Mechanization | 4 | 6 | 7 |
| AGR | 185 | Soil Science & Fertilizer | 3 | 6 | 6 |
| | | | <u>7</u> | <u>12</u> | <u>13</u> |
| FALL QUARTER | | | | | |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| AGR | 204 | Farm Business Management | 3 | 0 | 3 |
| AGR | 170 | Plant Science | 3 | 4 | 5 |
| BUS | 110 | Office Machines—(Elective) | 2 | 3 | 3 |
| | | | <u>*12/14</u> | <u>*6/9</u> | <u>*15/18</u> |

| | | | <i>Hours Per Week</i> | <i>Quarter</i> |
|-----------------------|-----|-------------------------------|-----------------------|-------------------------------|
| | | | <i>Class</i> | <i>Hours</i> <i>Credit</i> |
| WINTER QUARTER | | | | |
| ENG | 204 | Oral Communication | 3 | 4 |
| BUS | 232 | Sales Development | 5 | 5 |
| AGR | 205 | Agricultural Marketing | 3 | 4 |
| AGR | 278 | Weed Identification & Control | <u>3</u> | <u>4</u> |
| | | | 14 | 17 |
| SPRING QUARTER | | | | |
| PSY | 206 | Applied Psychology | 3 | 3 |
| SSC | 201 | Social Science | 3 | 3 |
| AGR | 290 | Soil Conservation | 3 | 4 |
| HOR | 150 | General Horticulture | <u>3</u> | <u>4</u> |
| | | | 12 | 14 |

*Second total applies when elective is taken.

AGRICULTURAL SCIENCE AND MECHANIZATION (WITH TECHNICAL SPECIALTY OPTION)*

PURPOSE

This curriculum provides a training program for developing the basic knowledge and skills needed for the successful operation and management of a general farming program involving crops and livestock. There is a growing scarcity of young men trained in basic agriculture science and mechanics. Larger farming operations require more mechanization and tremendous outlays of capital; thus, the need for trained farmers becomes increasingly critical. The objective of this curriculum is to provide the managerial and operative training needed for successful farm operation.

JOB DESCRIPTION

The graduate of the General Agriculture and Mechanics curriculum is trained to manage and operate a farm. In addition he should be able to perform most of the repairs to buildings and equipment as well as perform the necessary electrical, construction, and plumbing requirements pertaining to the farm operation.

*The satisfactory completion of a minimum of 18 hours of general education in addition to the technical specialties will lead to an Associate of Applied Science Degree.

*This program is designed for military veterans who qualify as farmers under Public Law 90-77, usually referred to as the G. I. Bill; however, any qualified student may enroll to complete the associate degree.

AGRICULTURAL SCIENCE AND MECHANIZATION (WITH TECHNICAL SPECIALTY OPTION)*

| | | | <i>Hours Per Week</i> | <i>Quarter</i> |
|----------------------|-----|-------------------------|-----------------------|-------------------------------|
| | | | <i>Class</i> | <i>Hours</i> <i>Credit</i> |
| FIRST QUARTER | | | | |
| AGR | 106 | Techniques of Welding I | 2 | 4 |
| AGR | 108 | Beef Production | <u>2</u> | <u>2</u> |
| | | | 4 | 6 |

SECOND QUARTER

| | | | | |
|---------|--------------------------------|----------|----------|----------|
| AGR 106 | Techniques of Welding II | 1 | 3 | 2 |
| AGR 117 | Feeds and Feeding Farm Animals | 2 | 0 | 2 |
| AGR 118 | Feed Grain Crops | 2 | 0 | 2 |
| AGR 105 | Pastures and Forage Crops | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 7 | 3 | 8 |

THIRD QUARTER

| | | | | |
|---------|------------------------|----------|----------|----------|
| AGR 114 | Farm Electrification I | 2 | 6 | 4 |
| AGR 109 | Soil Science | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 4 | 6 | 6 |

FOURTH QUARTER

| | | | | |
|---------|-------------------------|----------|----------|----------|
| AGR 114 | Farm Electrification II | 1 | 3 | 2 |
| AGR 140 | Vegetable Production | 2 | 0 | 2 |
| AGR 123 | Ornamental Horticulture | 2 | 0 | 2 |
| AGR 124 | Plant Propagation | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 7 | 3 | 8 |

FIFTH QUARTER

| | | | | |
|---------|-----------------------------------------|----------|----------|----------|
| AGR 122 | Farm Machinery Repair and Maintenance I | 2 | 6 | 4 |
| AGR 126 | Farm Forest Management | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 4 | 6 | 6 |

SIXTH QUARTER

| | | | | |
|---------|------------------------------------------|----------|----------|----------|
| AGR 122 | Farm Machinery Repair and Maintenance II | 1 | 3 | 2 |
| AGR 142 | Agriculture Finance | 2 | 0 | 2 |
| AGR 144 | Opportunities in Agriculture Business | 2 | 0 | 2 |
| AGR 121 | Weed Identification and Control | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 7 | 3 | 8 |

SEVENTH QUARTER

| | | | | |
|---------|------------------------------|----------|----------|----------|
| AGR 128 | Farm and Home Construction I | 2 | 6 | 4 |
| AGR 130 | Pesticides | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 4 | 6 | 6 |

EIGHTH QUARTER

| | | | | |
|---------|-------------------------------|----------|----------|----------|
| AGR 128 | Farm and Home Construction II | 1 | 3 | 2 |
| AGR 131 | Soybean Production | 2 | 0 | 2 |
| AGR 134 | Tobacco Production | 2 | 0 | 2 |
| AGR 139 | Fertilizers and Lime | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 7 | 3 | 8 |

NINTH QUARTER

| | | | | |
|---------|----------------------------------|----------|----------|----------|
| AGR 141 | Surveying I | 2 | 6 | 4 |
| AGR 132 | Livestock Diseases and Parasites | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 4 | 6 | 6 |

TENTH QUARTER

| | | | | |
|---------|----------------------------|----------|----------|----------|
| AGR 141 | Surveying II | 1 | 3 | 2 |
| AGR 135 | Agricultural Law | 2 | 0 | 2 |
| AGR 136 | Agricultural Math | 2 | 0 | 2 |
| AGR 143 | New Sources of Farm Income | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 7 | 3 | 8 |

ELEVENTH QUARTER

| | | | | |
|---------|--------------------------|----------|----------|----------|
| AGR 101 | Farm Tractors I | 2 | 6 | 4 |
| AGR 102 | Farm Business Management | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 4 | 6 | 6 |

TWELFTH QUARTER

| | | | | |
|---------|------------------------------|----------|----------|----------|
| AGR 101 | Farm Tractors II | 1 | 3 | 2 |
| AGR 138 | Farm Records and Taxes | 2 | 0 | 2 |
| AGR 107 | Farm Accounting and Records | 2 | 0 | 2 |
| AGR 103 | Swine Feeding and Management | <u>2</u> | <u>0</u> | <u>2</u> |
| | | 7 | 3 | 8 |

*The following additional subjects are provided for the student who pursues an Associate of Applied Science Degree and meets other graduation criteria as stated in the R.T.I. Student Handbook.

| | | | | |
|---------|---------------------------------|----|----|----|
| ENG 101 | Grammar | 3 | 0 | 3 |
| ENG 102 | Composition | 3 | 0 | 3 |
| ENG 103 | Report Writing | 3 | 0 | 3 |
| ENG 204 | Oral Communication | 3 | 2 | 4 |
| AGR 133 | Farm Water and Plumbing Systems | 3 | 9 | 6 |
| AGR 137 | Home Appliance Repair | 3 | 9 | 6 |
| | Social Science — Elective | 6 | 0 | 6 |
| | | 24 | 20 | 31 |

BUSINESS ADMINISTRATION

INTRODUCTION

In North Carolina the opportunities in business are increasing. With the increasing population and industrial development in this State, business has become more competitive and automated. Better opportunities in business will be filled by students with specialized education beyond the high school level.

PURPOSE

The Business Administration curriculum is designed to prepare the graduate for employment and immediate effectiveness in many types of administrative and management trainee positions throughout the industrial community. The objectives of the Business Administration curriculum are to develop the following competencies:

1. Understanding of the principles of organization and management in business operations;
2. Understanding our economy through study and analysis of the role of production and marketing;
3. Knowledge in specific elements of accounting, finance, and business law;
4. Understanding and skill in effective communication for business;
5. Knowledge of human relations as they apply to successful business operations in a rapidly expanding economy.

JOB DESCRIPTION

The graduates of the Business Administration curriculum may enter a variety of career opportunities from beginning sales or office manager trainee to specialized duties in production, quality control, or inventory control. The duties and responsibilities of these graduates vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data, credit and billing, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in businesses such as advertising, banking, credit, finance, retailing, wholesaling, hotel, tourist and travel industry, insurance, transportation, and communications.

BUSINESS ADMINISTRATION

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|------------------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| BUS | 120 | Accounting | 3 | 2 | 4 |
| MAT | 110 | Business Mathematics | 5 | 0 | 5 |
| | | | <hr/> | <hr/> | <hr/> |
| WINTER QUARTER | | | 20 | 5 | 22 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ECO | 102 | Economics | 5 | 0 | 5 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| BUS | 121 | Accounting | 3 | 2 | 4 |
| | | | <hr/> | <hr/> | <hr/> |
| SPRING QUARTER | | | 18 | 5 | 20 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ECO | 104 | Economics | 3 | 0 | 3 |
| BUS | 116 | Business Law | 5 | 0 | 5 |
| BUS | 122 | Accounting | 3 | 2 | 4 |
| BUS | 123 | Business Finance | 5 | 0 | 5 |
| | | | <hr/> | <hr/> | <hr/> |
| FALL QUARTER | | | 19 | 2 | 20 |
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 3 | 3 |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| BUS | 219 | Credit Procedures & Problems | 3 | 0 | 3 |
| BUS | 235 | Business Management | 5 | 0 | 5 |
| | | | <hr/> | <hr/> | <hr/> |
| WINTER QUARTER | | | 16 | 5 | 18 |
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| BUS | 211 | Office Machines | 2 | 3 | 3 |
| BUS | 229 | Taxes | 3 | 2 | 4 |
| BUS | 271 | Office Management | 3 | 0 | 3 |
| BUS | 232 | Sales Development | 5 | 0 | 5 |
| | | | <hr/> | <hr/> | <hr/> |
| SPRING QUARTER | | | 16 | 7 | 19 |
| SSC | 201 | Social Science | 3 | 0 | 3 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| BUS | 233 | Personnel Management & Supervision | 5 | 0 | 5 |
| BUS | 241 | Sales Promotion & Advertising | 5 | 0 | 5 |
| BUS | 247 | Business Insurance | 5 | 0 | 5 |
| | | | <hr/> | <hr/> | <hr/> |
| | | | 21 | 0 | 21 |

The following courses are available for business students as elective courses. These are not required for graduation; however, they do provide the opportunity for more in-depth study in the business area.

The courses are approved for veterans and will meet the additional hours requirements as established by the Veterans Administration.

WINTER QUARTER

BUS 160 Independent Research (Elective) 0 4 2
An elective course designed to acquaint the business student with various

methods, techniques and procedures of business and economic research. Problems selected must be approved by a faculty member, and progress will be continuously evaluated.

SPRING QUARTER

BUS 161 Independent Research (Elective) 0 4 2

An elective course that may be taken for additional credit, or in lieu of a course for which transfer credit has been given, or to enable a student to complete a project begun in BUS 160. Requires extensive use of research facilities under direction of a faculty member.

FALL QUARTER

**BUS 260 Special Problems and Research in Business,
Economics and Accounting (Elective)** 0 4 2

Prerequisites: BUS 161 and permission of Department Chairman.

WINTER QUARTER

**BUS 261 Special Problems and Research in Human
Relations, Money and Banking, and
Personnel Management (Elective)** 0 4 2

Prerequisites: BUS 260 and permission of Department Chairman.

SPRING QUARTER

**BUS 262 Special Problems and Research in Marketing,
Advertising, and Advanced Accounting (Elective)** 0 4 2

Prerequisites: BUS 261 and permission of Department Chairman.



GENERAL ENGINEERING TECHNOLOGY

Technician training is highly specialized training for effective entrance into various specialized areas of occupations. However, there is a core of knowledge and skills which all persons need in order to work at the technician level in any engineering field.

This program is designed to provide the basic subjects in mathematics, science, drafting, and general education which will prepare the successful student to enter one of the following: Civil, Air Conditioning, Mechanical, or Environmental Engineering Technology, or Mechanical Drafting and Design.

The first year will be taught at Robeson Technical Institute, with transfer options to Fayetteville Technical Institute to complete the requirements for the Associate of Applied Science Degree in one of the four engineering technologies mentioned above.

GENERAL ENGINEERING TECHNOLOGY*

| | | | <i>Hours Per Week</i> | | <i>Quarter</i> |
|-----------------------|-----|---------------------------------|-----------------------|------------|-------------------------|
| | | | <i>Class</i> | <i>Lab</i> | <i>Hours Credit</i> |
| FALL QUARTER | | | | | |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics | 5 | 0 | 5 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| DFT | 108 | Technical Drafting | 0 | 6 | 2 |
| SSC | 201 | Social Science | 3 | 0 | 3 |
| | | | <u>14</u> | <u>8</u> | <u>17</u> |
| WINTER QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| MAT | 102 | Technical Mathematics | 5 | 0 | 5 |
| PHY | 102 | Physics: Work, Energy, & Power | 3 | 2 | 4 |
| DFT | 109 | Technical Drafting | 0 | 6 | 2 |
| | | | <u>14</u> | <u>8</u> | <u>17</u> |
| SPRING QUARTER | | | | | |
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| MAT | 103 | Technical Mathematics | 5 | 0 | 5 |
| PHY | 103 | Physics: Work, Energy, & Power | 3 | 2 | 4 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| | | | <u>17</u> | <u>6</u> | <u>20</u> |

*Transfer Option: Mechanical Drafting & Design Technology
 Environmental Engineering Technology
 Air Conditioning Technology
 Mechanical Engineering Technology
 Civil Engineering Technology

GENERAL OFFICE TECHNOLOGY

INTRODUCTION

More people are now employed in clerical occupations than in any other single job category. Automation and increased production will mean that these people will need more technical skills and a greater adaptability for diversified types of jobs.

PURPOSE

The General Office Technology curriculum is designed to develop the necessary variety of skills for employment in the business world. Specialized training in skill areas is supplemented by related courses in Mathematics, Accounting, Business Law, and Applied Psychology.

JOB DESCRIPTION

The graduate of the General Office Technology curriculum may be employed as an administrative assistant, accounting clerk, assistant office manager, book-keeper, file clerk, machine transcriptionist, or a variety of other clerical-related jobs. Positions are available in almost every type of business, large or small.

GENERAL OFFICE TECHNOLOGY

| | | | <i>Hours Per Week</i> | <i>Quarter</i> |
|-----------------------|------|----------------------------------------|-----------------------|----------------|
| | | | <i>Class</i> | <i>Hours</i> |
| | | | <i>Lab</i> | <i>Credit</i> |
| FALL QUARTER | | | | |
| ENG | 101R | Grammar | 5 | 5 |
| BUS | 101 | Introduction to Business | 5 | 5 |
| BUS | 102 | Typewriting | 2 | 3 |
| MAT | 110 | Business Mathematics | 5 | 5 |
| | | | 17 | 18 |
| WINTER QUARTER | | | | |
| ENG | 102 | Composition | 3 | 3 |
| BUS | 103 | Typewriting | 2 | 3 |
| BUS | 115 | Business Law | 5 | 5 |
| BUS | 120 | Accounting | 3 | 4 |
| | | | 13 | 15 |
| SPRING QUARTER | | | | |
| ENG | 104R | Executive Spelling | 3 | 3 |
| BUS | 104 | Typewriting | 2 | 3 |
| BUS | 109R | Machine Transcription | 2 | 3 |
| BUS | 121 | Accounting | 3 | 4 |
| | | | 10 | 13 |
| FALL QUARTER | | | | |
| ENG | 201R | Advanced Grammar | 5 | 5 |
| ENG | 206 | Business Communication | 3 | 3 |
| EDP | 104 | Introduction to Data Processing | 3 | 4 |
| BUS | 205 | Advanced Typewriting | 2 | 3 |
| BUS | 110 | Office Machines | 2 | 3 |
| | | | 15 | 18 |
| WINTER QUARTER | | | | |
| PSY | 112 | Personal Development | 3 | 3 |
| ENG | 204 | Oral Communication | 3 | 4 |
| BUS | 211 | Office Machines | 2 | 3 |
| BUS | 229 | Taxes | 3 | 4 |
| | | | 11 | 14 |
| SPRING QUARTER | | | | |
| SSC | 201 | Social Science | 3 | 3 |
| PSY | 206 | Applied Psychology | 3 | 3 |
| BUS | 112 | Filing | 3 | 4 |
| BUS | 214 | Secretarial Procedures | 3 | 4 |
| BUS | 183 | Terminology, Vocabulary, & Punctuation | 5 | 5 |
| | | | 17 | 19 |

INDUSTRIAL MANAGEMENT

Industry's needs in positions of supervision and mid-management have grown extensively with the development of new methods of manufacturing and the increase in the national economy. This need has added emphasis to the necessity for well-trained individuals that can understand new methods and keep abreast of trends in the economy. The supervisor and persons in mid-management must be concerned daily with human behavior and the psychological factors which affect personnel working under their direction. They must also be conscious of the responsibilities of their position toward the total economic well-being of the industry.

The program is prepared to develop the individual's abilities in the art of communicating with his fellow worker by providing him with training in business and industrial management, psychology, production methods, and the general and social education that broadens one's perspective. This training should provide one with the opportunity to enter into an industrial occupation and, with experience, assume the responsibilities that go with supervisory and mid-management positions in industry.

INDUSTRIAL MANAGEMENT

| | | | <i>Hours Per Week</i> | | <i>Quarter</i> |
|-----------------------|------|-------------------------------------|-----------------------|------------|---------------------|
| | | | <i>Class</i> | <i>Lab</i> | <i>Hours Credit</i> |
| FALL QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| DFT | 108 | Technical Drafting | 0 | 6 | 2 |
| MAT | 110 | Business Math | 5 | 0 | 5 |
| | | | <u>17</u> | <u>9</u> | <u>20</u> |
| WINTER QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ECO | 102 | Economics | 5 | 0 | 5 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| DFT | 109 | Technical Drafting | 0 | 6 | 2 |
| | | | <u>15</u> | <u>9</u> | <u>18</u> |
| SPRING QUARTER | | | | | |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| BUS | 116 | Business Law | 5 | 0 | 5 |
| BUS | 233 | Personnel Management & Supervision | 5 | 0 | 5 |
| BUS | 123 | Business Finance | 5 | 0 | 5 |
| | | | <u>18</u> | <u>0</u> | <u>18</u> |
| FALL QUARTER | | | | | |
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| ISC | 120 | Principles of Industrial Management | 3 | 2 | 4 |
| ISC | 210 | Job Analysis and Evaluation | 3 | 2 | 4 |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| | | | <u>15</u> | <u>8</u> | <u>19</u> |
| WINTER QUARTER | | | | | |
| ISC | 231 | Manufacturing Cycles | 5 | 0 | 5 |
| ISC | 102 | Industrial Safety | 3 | 0 | 3 |
| ECO | 201 | Labor Economics and Labor Relations | 3 | 2 | 4 |
| ISC | 211 | Work Measurement | 3 | 2 | 4 |
| ISC | 207 | Foremanship Supervision | 3 | 0 | 3 |
| | | | <u>17</u> | <u>4</u> | <u>19</u> |

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|-----|-------------------------------|-----------------------|------------|-------------------------------------|
| SPRING QUARTER | | | <i>Class</i> | <i>Lab</i> | |
| SSC | 201 | Social Science | 3 | 0 | 3 |
| ISC | 202 | Quality Control | 3 | 2 | 4 |
| ISC | 220 | Management Problems | 3 | 0 | 3 |
| MEC | 213 | Production Planning | 3 | 0 | 3 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| ISC | 235 | Industrial Management Seminar | <u>1</u> | <u>2</u> | <u>2</u> |
| | | | 16 | 4 | 18 |

MECHANICAL DRAFTING AND DESIGN TECHNOLOGY

PURPOSE

There are identifiable skills which are common to all technicians of the general classification of mechanical drafting and design technology. This curriculum has been designed for training persons in the accepted performance of basic skills and to enable the individual student to become proficient in a short time after he becomes employed in industry.

The technician associates with many levels of thought and expression—administrative personnel, scientists, engineers, skilled workmen—and must be able to communicate effectively with all levels. Courses containing essential information from related subjects, such as mathematics, physics, and mechanics, have been included in order to provide the student a better academic base for his training. Emphasis is placed upon ability to think and plan, as well as drafting procedures and techniques.

JOB DESCRIPTION

Mechanical drafting and design technicians are concerned with the preparation of drawings for design proposals, for experimental models and items for production use.

These technicians perform many aspects of drafting in a specialized field, such as the development of the drawing for sub-assemblies or major components. Investigating design factors, availability of material and equipment, production methods, and facilities are frequent assignments. They assist in the design of units and controls from specifications by utilizing drawings of existing units and reports on functional performance. They may draw components in industrial fields based on engineers' original design concepts or specific ideas. They may be assigned as coordinators for the execution of related work of other design, production, tooling, material and planning. Technicians with experience in this classification may often supervise the preparation of working drawings.

These technicians are employed in many types of manufacturing, fabrication, research development, and service industries. Substantial numbers also are employed in communications, transportation, public utilities, consulting engineering firms, and federal, state, and local governments.

MECHANICAL DRAFTING AND DESIGN TECHNOLOGY

| | | <i>Hours Per Week</i> | <i>Quarter Hours Credit</i> |
|--|--|-----------------------|-------------------------------------|
| | | <i>Class</i> | <i>Lab</i> |

FALL QUARTER

| | | | | | |
|-----|-----|-----------------------|----------|----------|----------|
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics | 5 | 0 | 5 |
| DFT | 101 | Technical Drafting | 3 | 12 | 7 |
| MEC | 101 | Machine Processes | <u>1</u> | <u>6</u> | <u>3</u> |
| | | | 12 | 18 | 18 |

WINTER QUARTER

| | | | | | |
|-----|-----|-------------------------------|----------|----------|----------|
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 102 | Technical Mathematics | 5 | 0 | 5 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| DFT | 102 | Technical Drafting | 1 | 9 | 4 |
| MEC | 102 | Machine Processes | <u>1</u> | <u>6</u> | <u>3</u> |
| | | | 13 | 17 | 19 |

SPRING QUARTER

| | | | | | |
|-----|-----|------------------------------|----------|----------|----------|
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| MAT | 103 | Technical Mathematics | 5 | 0 | 5 |
| PHY | 102 | Physics: Work, Power, Energy | 3 | 2 | 4 |
| DFT | 103 | Technical Drafting | 3 | 9 | 6 |
| MEC | 103 | Machine Processes | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 16 | 14 | 21 |

FALL QUARTER

| | | | | | |
|-----|-----|----------------------------|----------|----------|----------|
| ENG | 204 | Oral Communications | 3 | 2 | 4 |
| PHY | 106 | Physics: Applied Mechanics | 3 | 2 | 4 |
| DFT | 201 | Technical Drafting | 1 | 9 | 4 |
| MEC | 205 | Strength of Materials | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 9 | 16 | 15 |

WINTER QUARTER

| | | | | | |
|-----|-----|---------------------------|----------|----------|----------|
| DFT | 205 | Design Drafting I | 3 | 9 | 6 |
| DFT | 211 | Mechanisms | 2 | 3 | 3 |
| MEC | 210 | Physical Metallurgy | 3 | 3 | 4 |
| MEC | 235 | Hydraulics and Pneumatics | <u>3</u> | <u>3</u> | <u>4</u> |
| | | | 11 | 18 | 17 |

SPRING QUARTER

| | | | | | |
|-----|-----|---------------------|----------|----------|----------|
| SSC | 201 | Social Science | 3 | 0 | 3 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| DFT | 230 | Structural Drafting | 3 | 12 | 7 |
| MEC | 211 | Physical Metallurgy | <u>3</u> | <u>3</u> | <u>4</u> |
| | | | 12 | 15 | 17 |

REAL ESTATE SALES AND MANAGEMENT

Professionalization of the real estate field is developing rapidly nationally. Real estate sales annually reach billions of dollars in the United States. Personal success in real estate sales and management will require extensive study and training.

The curriculum in Real Estate Sales and Management is designed to provide courses in general education, business administration, and real estate sales and management.

This program is approved by the North Carolina Real Estate Board and the North Carolina Association of Realtors.

REAL ESTATE SALES & MANAGEMENT

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|---------------------|------|--------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| BUS | 110 | Office Machines | 2 | 3 | 3 |
| MAT | 110 | Business Mathematics | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 19 | 6 | 21 |

| WINTER QUARTER | | | | | |
|----------------|-----|-------------------|----|---|----|
| ENG | 102 | Composition | 3 | 0 | 3 |
| ECO | 102 | Economics | 5 | 0 | 5 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| BUS | 232 | Sales Development | 5 | 0 | 5 |
| | | | 20 | 3 | 21 |

| SPRING QUARTER | | | | | |
|----------------|-----|---------------------------------|-----------|----------|-----------|
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ECO | 104 | Economics | 3 | 0 | 3 |
| BUS | 116 | Business Law | 5 | 0 | 5 |
| BUS | 241 | Sales Promotion and Advertising | 5 | 0 | 5 |
| BUS | 123 | Business Finance | 5 | 0 | 5 |
| | | | <u>21</u> | <u>0</u> | <u>21</u> |

| FALL QUARTER | | | | | |
|--------------|-----|-------------------------------|----------|----------|----------|
| ARC | 201 | North Carolina Building Codes | 5 | 0 | 5 |
| BUS | 217 | Business Law of Real Estate | 5 | 0 | 5 |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| ARC | 202 | Residential Construction | 3 | 0 | 3 |
| BUS | 235 | Business Management | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 21 | 0 | 21 |

| WINTER QUARTER | | | | | |
|----------------|-----|--------------------------------------|----------|----------|----------|
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| BUS | 250 | Real Estate Management and Brokerage | 5 | 0 | 5 |
| BUS | 229 | Taxes | 3 | 2 | 4 |
| BUS | 271 | Office Management | 3 | 0 | 3 |
| ARC | 203 | Commercial Construction | <u>3</u> | <u>0</u> | <u>3</u> |
| | | | 17 | 4 | 19 |

| SPRING QUARTER | | | | | |
|----------------|-----|--------------------------------------|----------|----------|----------|
| SSC | 201 | Social Science | 3 | 0 | 3 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| BUS | 233 | Personnel Management and Supervision | 5 | 0 | 5 |
| BUS | 251 | Real Estate Appraisal | 5 | 0 | 5 |
| BUS | 247 | Business Insurance | <u>5</u> | <u>0</u> | <u>5</u> |
| | | | 21 | 0 | 21 |

SECRETARIAL — EXECUTIVE

INTRODUCTION

The tremendous business and industrial expansion throughout North Carolina has placed even greater demands on operating executives. Because of these demands, increased emphasis has been placed on the requirements for more and better qualified stenographers and executive secretaries to relieve the manager of routine administrative matters.

PURPOSE

The purpose of this curriculum is to outline a program of instruction that will provide training in secretarial procedures and practices required by business office managers and insure that graduates of this course will be immediately effective upon accepting employment in a business office.

The objectives of the Executive Secretarial curriculum are to develop the following competencies:

1. Skill in typing, dictation, transcription, and business terminology;
2. Special training in accounting, business mathematics, business law, and office machines;
3. Understanding and skill in the effective use of communications, human relations and personality, and social science in business functions.

JOB DESCRIPTION

The graduate of the Executive Secretarial curriculum will qualify for a variety of positions requiring skill in dictation, accurate transcription of business letters and reports, general knowledge of the business community, and may be employed as a stenographer or executive secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The executive secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. The graduate may enter a secretarial position in a variety of offices in businesses such as insurance companies, banks, marketing institutions, and financial firms.

SECRETARIAL — EXECUTIVE

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|--------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| BUS | 106 | Shorthand | 3 | 2 | 4 |
| MAT | 110 | Business Mathematics | 5 | 0 | 5 |
| | | | 20 | 5 | 22 |
| WINTER QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 107 | Shorthand | 3 | 2 | 4 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| BUS | 120 | Accounting | 3 | 2 | 4 |
| | | | 16 | 7 | 19 |
| SPRING QUARTER | | | | | |
| ENG | 104R | Executive Spelling | 3 | 0 | 3 |
| BUS | 104 | Typewriting | 2 | 3 | 3 |
| BUS | 108 | Shorthand | 3 | 2 | 4 |
| BUS | 121 | Accounting | 3 | 2 | 4 |
| | | | 11 | 7 | 14 |

| | | | <i>Hours</i> | <i>Per Week</i> | <i>Quarter</i> |
|-----------------------|-----|-----------------------------------------|--------------|-----------------|----------------|
| | | | <i>Class</i> | <i>Lab</i> | <i>Hours</i> |
| | | | | | <i>Credit</i> |
| FALL QUARTER | | | | | |
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 3 | 3 |
| BUS | 205 | Advanced Typewriting | 2 | 3 | 3 |
| BUS | 206 | Dictation and Transcription | 3 | 2 | 4 |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| | | | 13 | 10 | 17 |
| WINTER QUARTER | | | | | |
| PSY | 112 | Personal Development | 3 | 0 | 4 |
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| BUS | 207 | Dictation and Transcription | 3 | 2 | 4 |
| BUS | 211 | Office Machines | 2 | 3 | 3 |
| BUS | 229 | Taxes | 3 | 2 | 4 |
| | | | 14 | 9 | 18 |
| SPRING QUARTER | | | | | |
| BUS | 112 | Filing | 3 | 2 | 4 |
| BUS | 183 | Terminology, Vocabulary and Punctuation | 5 | 0 | 5 |
| SSC | 201 | Social Science | 3 | 0 | 3 |
| BUS | 208 | Dictation and Transcription | 3 | 2 | 4 |
| BUS | 214 | Secretarial Procedures | 3 | 2 | 4 |
| | | | 17 | 6 | 20 |

SECRETARIAL — LEGAL

INTRODUCTION

The demand for better qualified legal secretaries in our ever-expanding legal profession throughout the state is becoming more acute. Qualified legal secretaries will relieve the attorney of routine administrative matters.

PURPOSE

The purpose of the Legal Secretary curriculum is to outline a training program that will provide specialized training in the accepted procedures required by the legal profession, and to enable persons to become proficient soon after accepting employment in the legal office.

The objectives of the Legal Secretarial curriculum are to develop the following competencies:

1. Skill in typing, dictation, transcription, and legal terminology;
2. Special training in accounting, business mathematics, business law, and office machines;
3. Understanding and skill in the effective use of communications, human relations and personality, and social science in legal functions.

JOB DESCRIPTION

The graduate of the Legal Secretarial curriculum should have a knowledge of legal terminology, skill in dictation and accurate transcription of legal records, reports, letters, and documents. The duties of a legal secretary may consist of: taking dictation and transcribing letters, memoranda and reports, meeting office callers and screening telephone calls, filing, and scheduling appointments. Opportunities for employment of the graduate exist in a variety of secretarial positions in the legal profession such as in lawyers' offices and state and government offices.

SECRETARIAL — LEGAL

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|------------------------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FIRST QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| MAT | 110 | Business Mathematics | 5 | 0 | 5 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| BUS | 106 | Shorthand | 3 | 2 | 4 |
| | | | 20 | 5 | 22 |
| SECOND QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 107 | Shorthand | 3 | 2 | 4 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| BUS | 120 | Accounting | 3 | 2 | 4 |
| | | | 16 | 7 | 19 |
| THIRD QUARTER | | | | | |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| BUS | 104 | Typewriting | 2 | 3 | 3 |
| BUS | 108 | Shorthand | 3 | 2 | 4 |
| BUS | 116 | Business Law | 5 | 0 | 5 |
| BUS | 121 | Accounting | 3 | 2 | 4 |
| | | | 16 | 7 | 19 |
| FOURTH QUARTER | | | | | |
| ENG | 206 | Business Communication | 3 | 0 | 3 |
| EDP | 104 | Introduction to Data Processing | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 3 | 3 |
| BUS | 205 | Advanced Typewriting | 2 | 3 | 3 |
| BUS | 206L | Dictation & Transcription (Legal) | 3 | 2 | 4 |
| | | | 13 | 10 | 17 |
| FIFTH QUARTER | | | | | |
| ENG | 204 | Oral Communication | 3 | 2 | 4 |
| PSY | 112 | Personal Development | 3 | 0 | 3 |
| BUS | 207L | Dictation & Transcription (Legal) | 3 | 2 | 4 |
| BUS | 211 | Office Machines | 2 | 3 | 3 |
| BUS | 229 | Taxes | 3 | 2 | 4 |
| | | | 14 | 7 | 17 |
| SIXTH QUARTER | | | | | |
| SSC | 201 | Social Science | 3 | 0 | 3 |
| BUS | 112 | Filing | 3 | 2 | 4 |
| BUS | 183L | Term., Vocabulary, & Punctuation (Legal) | 5 | 0 | 5 |
| BUS | 208L | Dictation & Transcription (Legal) | 3 | 2 | 4 |
| BUS | 214 | Secretarial Procedures | 3 | 2 | 4 |
| | | | 17 | 4 | 19 |

SECRETARIAL — MEDICAL

INTRODUCTION

The recent expansion of existing medical facilities in Robeson County and the increasing number of physicians practicing in this area has created a demand for qualified medical stenographers and secretaries which far exceeds the supply of trained personnel. Qualified Medical Secretaries will relieve the physician of routine administrative matters.

PURPOSE

The purpose of this curriculum is to outline a program of instruction that will provide training in secretarial procedures and practices required by the physicians and hospital administrators and insure that graduates of this course will be immediately effective upon accepting employment in a medical office.

The objectives of the Medical Secretarial curriculum are to develop the following competencies:

1. Skill in typing, dictation, transcription, and medical terminology;
2. Special training in accounting, business mathematics, business law, and office machines;
3. Understanding and skill in the effective use of communications, human relations and personality, and social science in medical functions.

JOB DESCRIPTIONS

The graduate of the Medical Secretary program will qualify for a variety of positions requiring skill in dictation, accurate transcription of business and medical letters, medical reports, general knowledge of the medical office operation, and may be employed as a medical stenographer or secretary. Medical stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The medical secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, making appointments, screening telephone calls, and being an assistant to the physician. The graduate may enter a secretarial position in a variety of offices in hospitals, medical supply houses, physicians' offices and clinics.

SECRETARIAL — MEDICAL

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|--------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FIRST QUARTER | | | | | |
| ENG | 101R | Grammar | 5 | 0 | 5 |
| MAT | 110 | Business Mathematics | 5 | 0 | 5 |
| BUS | 102 | Typewriting | 2 | 3 | 3 |
| BUS | 101 | Introduction to Business | 5 | 0 | 5 |
| BUS | 106 | Shorthand | 3 | 2 | 4 |
| | | | 20 | 5 | 22 |
| SECOND QUARTER | | | | | |
| ENG | 102 | Composition | 3 | 0 | 3 |
| BUS | 103 | Typewriting | 2 | 3 | 3 |
| BUS | 107 | Shorthand | 3 | 2 | 4 |
| BUS | 120 | Accounting | 3 | 2 | 4 |
| BUS | 115 | Business Law | 5 | 0 | 5 |
| | | | 16 | 7 | 19 |
| THIRD QUARTER | | | | | |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| BUS | 104 | Typewriting | 2 | 3 | 3 |
| BUS | 108 | Shorthand | 3 | 2 | 4 |
| BUS | 121 | Accounting | 3 | 2 | 4 |
| BUS | 116 | Business Law | 5 | 0 | 5 |
| | | | 16 | 7 | 19 |

| | | | <i>Hours Per Week</i> | <i>Quarter</i> |
|-----------------------|------|--------------------------------------------|-----------------------|----------------|
| | | | <i>Class</i> | <i>Hours</i> |
| | | | <i>Lab</i> | <i>Credit</i> |
| FOURTH QUARTER | | | | |
| BIO | 110 | Anatomy | 3 | 3 |
| BUS | 206M | Dictation & Transcription (Medical) | 3 | 4 |
| BUS | 205 | Advanced Typewriting | 2 | 3 |
| BUS | 110 | Office Machines | 2 | 3 |
| EDP | 104 | Introduction to Data Processing | 3 | 4 |
| | | | 13 | 17 |
| FIFTH QUARTER | | | | |
| BUS | 207M | Dictation & Transcription (Medical) | 3 | 4 |
| BUS | 229 | Taxes | 3 | 4 |
| BUS | 211 | Office Machines | 2 | 3 |
| ENG | 204 | Oral Communication | 3 | 4 |
| PSY | 112 | Personal Development | 3 | 3 |
| | | | 14 | 18 |
| SIXTH QUARTER | | | | |
| BUS | 208M | Dictation & Transcription (Medical) | 3 | 4 |
| BUS | 214 | Secretarial Procedures | 3 | 4 |
| BUS | 183M | Term., Vocabulary, & Punctuation (Medical) | 5 | 5 |
| BUS | 112 | Filing | 3 | 4 |
| SSC | 201 | Social Science | 3 | 3 |
| | | | 17 | 20 |

COURSE DESCRIPTIONS

ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAMS

The following section provides a brief description for each course listed in the previous section. Courses are listed alphabetically by prefix and arranged in ascending order by number (e.g., BUS 101, BUS 110, BUS 205, ENG 101, etc.).

The numbers given on the right side of the page (3 2 4) indicate the following: First number gives the hours per week of lecture, second number gives the hours per week of laboratory or shop, and the third number indicates the quarter hour credit for that one course.

AGR 101 Farm Tractors 3 9 6

A study of farm tractors including gas and diesel engines. Units to be studied include engines, ignition, electrical, braking, cooling and transmission systems.

AGR 102 Farm Business Management 2 0 2

A review of the functions of the manager of a business firm and the problems of farm operators. Development of the concepts of costs and budgets as an aid in choosing what to produce. An analysis of the factors of production to find the least cost production procedure. Data will be analyzed to select the level of production that yields the highest net revenue. Relationships between size, efficiency, and gross farm income and net farm income will be stressed.

AGR 103 Swine Feeding and Management 2 0 2

A study of the scientific methods of selecting, breeding, feeding, and management of swine. Special attention will be given to housing and marketing.

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| AGR 104 Introduction to Agricultural Economics | 3 | 0 | 3 |
| An introduction to economics, the functions of the economic system, and agriculture's role in the economy. A review of the functions of the manager, and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms. | | | |
| AGR 105 Pastures and Forage Crops | 2 | 0 | 2 |
| A study of the major grasses and legumes of economic importance in North Carolina. Attention will be given to management, soil types, fertilization, harvesting, and nutrient value. | | | |
| AGR 106 Techniques of Welding | 3 | 9 | 6 |
| This course will cover both arc and gas welding. The safe and correct methods of assembling and operating welding equipment will be stressed. Welded joints and flame cutting are discussed and practiced in various positions that are applicable to mechanical repair work and steel fabrication. Care, maintenance, and selection of welding equipment and supplies are applied in this course. | | | |
| AGR 107 Farm Accounting and Records | 2 | 0 | 2 |
| An introductory course to accounting methods related to farm needs which acquaints the student with terminology, basic principles and techniques used in recording transactions. Practical application of the principles learned are made by working with actual farm situations. | | | |
| AGR 108 Beef Production | 2 | 0 | 2 |
| A study of the principles of selecting, breeding, feeding, care and management of beef cattle. | | | |
| AGR 109 Soil Science | 2 | 0 | 2 |
| This course deals with the development, classification, evaluation and management of soils; care, cultivation, and conservation of soil fertilization. | | | |
| AGR 114 Farm Electrification | 3 | 9 | 6 |
| A study of basic principles of wiring farm buildings and the application of electricity to agriculture production. | | | |
| AGR 117 Feeds and Feeding Farm Animals | 2 | 0 | 2 |
| A study of the composition of feeds, feed additives, and the nutritional requirements of livestock. The course includes a study of the principles used in the formulation of practical and economical livestock rations. | | | |
| AGR 118 Feed Grain Crops | 2 | 0 | 2 |
| This course stresses the value of scientific methods in the production of corn, oats, wheat, barley and sorghum. Varieties, soils, fertilization, cultivation, harvesting and utilization are included. | | | |
| AGR 121 Weed Identification and Control | 2 | 0 | 2 |
| A study dealing with the identification and control of annual and perennial weeds and grasses of economic importance in North Carolina. | | | |

AGR 122 Farm Machinery Repair and Maintenance 3 9 6

This course emphasizes the proper care of farm machinery and the economic value of proper servicing and management. All kinds of farm machinery will be utilized and the student will develop skills through actual demonstrations and shop practice.

AGR 123 Ornamental Horticulture 2 0 2

A study of the principles of care and selection of plants, shrubs, trees and grasses for the home landscape. Field trips and demonstrations will be utilized in the development of skills and practices needed in landscape planning.

AGR 124 Plant Propagation 2 0 2

The various means of plant reproduction are scientifically studied. Special attention is given to the propagation of shrubs for the home landscape plan.

AGR 125 Animal Science 3 4 5

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, and digestion along with the selection, feeding improvement, processing, and marketing of livestock.

AGR 126 Farm Forest Management 2 0 2

A course dealing with the fundamentals of forestry and farm forestry problems, including planting, thinning, harvesting and marketing.

AGR 128 Farm and Home Construction 3 9 6

This course deals with the fundamentals of farm carpentry, fences, concrete and masonry. Part of the course gives students an opportunity to learn and practice home construction projects such as kitchen cabinets.

AGR 130 Pesticides 2 0 2

A study of the beneficial and harmful insects affecting farm production in North Carolina and the methods of control.

AGR 131 Soybean Production 2 0 2

Crop characteristics, varieties, environmental factors, rotations, control of pests and other production practices are covered.

AGR 132 Livestock Diseases and Parasites 2 0 2

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control.

AGR 133 Farm Water and Plumbing Systems 3 9 6

This course is a study of the farm water needs and waste disposal. Attention is given to planning and installing the system and its proper care and maintenance.

| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|
| AGR 134 Tobacco Production | 2 | 0 | 2 |
| This course discusses the production practices that are relevant to flue-cured tobacco in North Carolina. Emphasized will be plant bed practices and field production—machinery, cultural practices, fertilization, harvesting and marketing. | | | |
| AGR 135 Agricultural Law | 2 | 0 | 2 |
| A general course designed to acquaint the student with certain fundamentals and principles of law, including contracts, agency and negotiable instruments. Includes the general study of law pertaining to partnership, corporation, sales, suretyship, bailments, and real property. | | | |
| AGR 136 Agricultural Math | 2 | 0 | 2 |
| This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business. | | | |
| AGR 137 Farm and Home Appliance Repair | 3 | 9 | 6 |
| This course teaches the student how to repair all home appliances with emphasis on commonly used electrical appliances and machines in the home or on the farm. | | | |
| AGR 138 Farm Records and Taxes | 2 | 0 | 2 |
| This is a study of the records necessary to properly complete a tax form and the procedures and skills needed for income tax computations. | | | |
| AGR 139 Fertilizers and Lime | 2 | 0 | 2 |
| A review of the source, function, and the use of the major and minor plant food elements; commercial fertilizer ingredients; soil acidity, liming materials; application of fertilizer and liming materials. | | | |
| AGR 140 Vegetable Production | 2 | 0 | 2 |
| This course stresses the production practices involved in land care and use for vegetable farming. Emphasis will be placed on harvesting and marketing. | | | |
| AGR 141 Surveying | 3 | 9 | 6 |
| Theory and practice of elementary plane surveying including horizontal measurements, differential and profile leveling, cross sections, earth-work computations, transit, stadia, and transit-tape surveys. | | | |
| AGR 142 Agriculture Finance | 2 | 0 | 2 |
| Analysis of the capital structure of modern commercial agriculture with emphasis on the sources of credit. A review of lending institutions, repayment, schedules, and credit instruments. Practice in the procedure of evaluating farm resources with attention to information needed for valuation, appraisal forms and procedures, discounting and depreciation. | | | |
| AGR 143 New Sources of Farm Income | 2 | 0 | 2 |
| This is a study of new areas of production that are not in practice in the stu- | | | |

dent's present farming program. The farm enterprise system will be analyzed and new enterprises suggested.

AGR 144 Opportunities in Agriculture Business 2 0 2

This course presents the opportunities for part or full-time employment in farm-related occupations. Agriculture businesses such as feeds and fertilizers as well as farm custom machinery work are considered.

AGR 170 Plant Science 3 4 5

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed bearing plants with application to certain commercially important plants in North Carolina.

AGR 185 Soil Science & Fertilizer 3 6 6

A course dealing with the basic principles of efficient classification, evaluation, and management of soils; care, cultivation and fertilization of the soil, and conservation of soil fertility. Includes a review of the source, function, and the use of the major and minor plant food elements; commercial fertilizer ingredients; soil acidity, liming materials; application of fertilizer and liming materials.

AGR 201 Agricultural Chemicals 3 2 4

A study of agricultural chemicals — their importance, ingredients, formulation, and application with emphasis upon the effective and safe utilization of chemicals in agricultural pest control. Major emphasis is placed upon weed identification and those chemicals utilized for weed control. Part of the course is devoted to those chemicals other than herbicides — such as insecticides, fungicides, and others.

AGR 204 Farm Business Management 3 0 3

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager.

AGR 205 Agricultural Marketing 3 2 4

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market structure and the relationship of local, terminal, wholesale, retail, and foreign markets. Problems in the operations of marketing firms — including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and co-operation. Discussion of procedures of marketing such commodities as grain, cotton, livestock, and tobacco.

AGR 218 Agricultural Mechanization 4 6 7

A study of farm machinery management and labor-saving devices. The economics

of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems, and other labor-saving devices.

AGR 226 Swine Production 3 2 4

Development of swine production and marketing industries; principles and practices of selection, breeding, feeding, housing, marketing, and management of swine.

AGR 228 Livestock Diseases & Parasites 3 4 5

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis upon the cause, damage, symptoms, prevention, and treatment of parasites and diseases; management factors relating to disease and parasite prevention and control. •

AGR 278 Weed Identification & Control 3 2 4

A study of the identification and control of the annual and perennial weeds of economic importance in North Carolina.

AGR 290 Soil Conservation 3 2 4

An introduction to soil and water conservation, covering what is included and who is involved in soil, water, and plant conservation; the available resources to carry out soil and water conservation measures, and the relationship of specialized knowledge in agronomy, biology, economics, engineering, soils, forestry, and recreation.

BIO 110 Anatomy 3 0 3

An introductory study of anatomy and functions of the human body and its systems, with emphasis upon the interrelatedness of these functions and processes. Thorough coverage of terminology used in day-to-day situations in a medical office.

BUS 101 Introduction to Business 5 0 5

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management.

BUS 102 Typewriting 2 3 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103 Typewriting 2 3 3

Designed to improve speed and accuracy with continued emphasis on subjects taught in BUS 102.

Prerequisite: BUS 102

BUS 104 Typewriting 2 3 3

Emphasis on production typing problems and speed building. Attention to the

development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent.

Speed requirement, 40 words per minute for five minutes.

BUS 106 Shorthand 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107 Shorthand 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108 Shorthand 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

BUS 109R Machine Transcription 2 3 3

A beginning course in developing the skill of transcribing at the typewriter materials appropriate to the various business and professional offices in which the student may eventually be employed. The objective of the course is accuracy and comprehension, and the student will be expected to complete a minimum of fifty typewritten business forms without error.

Prerequisite: BUS 103.

BUS 110 Office Machines 2 3 3

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

BUS 112 Filing 3 2 4

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal Filing.

BUS 115 Business Law 5 0 5

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116 Business Law 5 0 5

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights.

Prerequisite: BUS 115.

BUS 120 Accounting 3 2 4

Principles, techniques, and tools of accounting, for understanding of the mechanics

of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 Accounting 3 2 4
Continuation of accounting principles learned in BUS 120 with detailed emphasis on notes, deferrals, accruals. Includes a study of current and fixed assets with special attention to receivables, inventory and plant assets.
Prerequisite: BUS 120

BUS 122 Accounting 3 2 4
Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing, and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.
Prerequisite: BUS 121.

BUS 123 Business Finance 5 0 5
Financing of business units, as individuals, partnership, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

BUS 160 Independent Study (Elective) 0 4 2
An elective course to provide help for the business student needing assistance in attaining a specific goal. The course selected must be approved by a member of the Business Faculty; and progress will be continuously evaluated. Problems may be selected from the areas of Business, Accounting, or Secretarial Science.

BUS 161 Independent Study (Elective) 0 4 2
An elective course that may be taken for either additional credit, or in lieu of a course for which transfer credit has been given, or to enable a student to complete a project begun in BUS 160. The project chosen must be with approval of a Business Faculty member, and progress will be continuously evaluated.

BUS 183E-L-M Term., Vocabulary & Punctuation 5 0 5
A course to develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

BUS 205 Advanced Typewriting 2 3 3
Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation; and the typing of reports, manuscripts, and legal documents.
Prerequisite: BUS 104. Speed requirement, 50 words per minute for five minutes.

BUS 206E-M-L Dictation & Transcription 3 2 4
Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the

theory and the dictation of familiar and unfamiliar materials at varying rates of speed. Minimum dictation rate of 100 words per minute required for five minutes on new materials.

Prerequisite: BUS 108.

BUS 207E-M-L Dictation & Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for five minutes on new material.

Prerequisite: BUS 206E-M-L.

BUS 208E-M-L Dictation & Transcription 3 2 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 120 words per minute required for five minutes on new material.

Prerequisite: BUS 207.

BUS 211 Office Machines 2 3 3

Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.

Prerequisite: BUS 110.

BUS 214 Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 219 Credit Procedures & Problems 3 0 3

Develops an understanding of the principles of credit collection, control, and security. Presents fundamentals of the collection agency principle.

BUS 222 Intermediate Accounting 3 2 4

Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes, among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.

Prerequisite: BUS 121.

BUS 223 Intermediate Accounting 3 2 4

Additional study of intermediate accounting with emphasis on investments, plants and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes.

Prerequisite: BUS 222.

BUS 225 Cost Accounting 3 2 4

Nature and purposes of cost accounting; accounting for direct labor, materials,

and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures.

Prerequisite: BUS 121.

BUS 229 Taxes 3 2 4

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

Prerequisite: BUS 121

BUS 232 Sales Development 5 0 5

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

BUS 233 Personnel Management & Supervision 5 0 5

A study of the fundamental differences in the theories (schools) in dealing with the human resource in industry. Primary emphasis on human relations management versus the scientific approach. Provides an overview of different methods and techniques of supervision with emphasis on securing an effective work force.

BUS 235 Business Management 5 0 5

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the design-making function versus the operating function. Role of management in business—qualifications and requirements.

BUS 239 Marketing & Retailing 5 0 5

A general survey of the processes of transferring goods from producer to consumer. Includes a detailed study of the function, policies, and institutions involved in marketing, combined with a study of the current retail structure. Special emphasis is placed on problems resulting from current economic and social trends.

BUS 241 Sales Promotion & Advertising 5 0 5

The scope and activities of promoting the selling action with emphasis on the coordination of advertising, display, special events, publicity, and management of the sales force. Special attention is to be given to product and marketing research. Selection of media, means of testing effectiveness of media, writing of advertising copy, budgeting and implementation.

BUS 247 Business Insurance 5 0 5

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included.

**BUS 260 Special Problems and Research in Business,
Secretarial Science, Economics, and Accounting
(Elective)** 0 4 2

Prerequisites. BUS 161 and permission of the Department Chairman.

| | | | | |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| BUS 261 | Special Problems and Research in Money and Banking, Advanced Accounting, Machine Transcription, and Business Vocabulary (elective) | 0 | 4 | 2 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|

Prerequisites: BUS 260 and permission of the Department Chairman.

| | | | | |
|----------------|--------------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| BUS 262 | Special Problems and Research in Marketing, Advertising, Human Relations, and Secretarial Skills (Elective) | 0 | 4 | 2 |
|----------------|--------------------------------------------------------------------------------------------------------------------|----------|----------|----------|

Prerequisites: BUS 261 and permission of the Department Chairman.

| | | | | |
|----------------|--------------------------|----------|----------|----------|
| BUS 271 | Office Management | 3 | 0 | 3 |
|----------------|--------------------------|----------|----------|----------|

Presents the fundamental principles of office management. Emphasis on the role of office management including its function, office automation, planning, controlling, organizing, and actuating office problems.

| | | | | |
|----------------|--------------------------|----------|----------|----------|
| BUS 276 | Money and Banking | 3 | 0 | 3 |
|----------------|--------------------------|----------|----------|----------|

A study of money, credit, commercial and central banking; credit control under the Federal Reserve System; monetary and fiscal theories and policies.

Prerequisite: BUS 124, ECO 102.

| | | | | |
|----------------|------------------|----------|----------|----------|
| CHM 101 | Chemistry | 3 | 4 | 5 |
|----------------|------------------|----------|----------|----------|

Study of the physical and chemical properties of substances, chemical changes; elements, compounds, gases, chemical combinations, weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, emulsions. In addition, study of carbohydrates, electro-chemistry, electrolytes, and electrolysis in their application of chemistry to industry.

| | | | | |
|----------------|---------------------------|----------|-----------|----------|
| DFT 101 | Technical Drafting | 3 | 12 | 7 |
|----------------|---------------------------|----------|-----------|----------|

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

| | | | | |
|----------------|---------------------------|----------|----------|----------|
| DFT 102 | Technical Drafting | 1 | 9 | 4 |
|----------------|---------------------------|----------|----------|----------|

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and "working drawings" approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

DFT 103 Technical Drafting 3 9 6

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections, will be included.

Prerequisite: DFT 102.

DFT 108 Technical Drafting 0 6 2

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

DFT 109 Technical Drafting 0 6 2

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and "working drawings" approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

DFT 201 Technical Drafting 1 9 4

Descriptive geometry with emphasis on the analysis of space problems involving points, lines, planes, connectors, and a combination of these. Further emphasis on the applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding symbols; methods of representing and specifying will be covered. Basic mechanisms of motor transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and delineating.

Prerequisite: DFT 103.

DFT 205 Design Drafting I 3 9 6

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.

Prerequisites: MAT 102, PHY 102.

DFT 211 Mechanisms 2 3 3

Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities and acceleration

of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.

Prerequisite: DFT 201, MAT 103, PHY 106.

DFT 230 Structural Drafting 3 12 7

A study and drawings of structural plans, details and shop drawings of the structural components of buildings and machines to include steel, reinforced concrete, and timber structures. Appropriate symbols, conventions, dimensioning practices, and notes as used by the draftsman will be included. Emphasis will be placed on drafting of appropriate drawings for fabrication and erection of the structural components.

Prerequisites: DFT 103, DFT 205.

ECO 102 Economics 5 0 5

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

ECO 104 Economics 3 0 3

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.

ECO 201 Labor Economics and Labor Relations 3 2 4

Emphasis is placed on the history of the labor movement in the United States, the development of methods and strategies by labor organizations and by management, the shift in the means of public control; and the factors of income and economic security.

Prerequisite: ECO 102.

EDP 104 Introduction to Data Processing 3 2 4

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses.

ENG 101 Grammar 3 0 3

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life.

ENG 101R Grammar 5 0 5

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life.

ENG 102 Composition

3 0 3

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph, and whole composition.

Prerequisite: ENG 101 or ENG 101R

ENG 103 Report Writing

3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must relate to the student's specific curriculum.

Prerequisite: ENG 102.

ENG 104R Executive Spelling

3 0 3

A realistic learn-to-spell program, presenting key words the student needs to master in order to be able to communicate effectively in the world of business. Particular emphasis will be placed on effective use of the dictionary with words most likely to be encountered by the beginning employee in a business office.

ENG 201R Advanced Grammar

5 0 5

An advanced, intensive course in grammar designed to strengthen the ability of the student to express himself in written and oral communication. The course is also intended to reinforce previously acquired knowledge of machine transcription and to provide additional assistance in the preparation of letters and other business forms.

Prerequisite: ENG 101R.

ENG 204 Oral Communication

3 2 4

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews.

Prerequisite: Eng 101, or ENG 101R.

ENG 206 Business Communication

3 0 3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action—getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.

Prerequisite: ENG 102.

HOR 150 General Horticulture

3 2 4

A course dealing with horticulture principles and the application of plant science fundamentals to horticultural practices.

| | | | |
|----------------------------------|----------|----------|----------|
| ISC 102 Industrial Safety | 3 | 0 | 3 |
|----------------------------------|----------|----------|----------|

Problems of accidents and fire in industry. Management and supervisory responsibility for fire and accident prevention. Additional topics cover accident reports and the supervisor; good housekeeping and fire prevention; machine guarding and personnel protective equipment; state industrial accident code and fire regulations; the first aid department and the line of supervisory responsibility; job instruction and safety instruction; company rules and enforcement; use of safety committees; insurance carrier and the Insurance Rating Bureau; and advertising and promoting a good safety and fire prevention program.

| | | | |
|----------------------------------------------------|----------|----------|----------|
| ISC 120 Principles of Industrial Management | 3 | 2 | 4 |
|----------------------------------------------------|----------|----------|----------|

The basic managerial decisions; organizational structure including plant location, building requirements, and internal factory organization; problems of factory operation and control, planning, scheduling, routing factory production, stores control, labor control, purchasing, cost control. Plant problems are utilized as lab experiments.

| | | | |
|--------------------------------|----------|----------|----------|
| ISC 202 Quality Control | 3 | 2 | 4 |
|--------------------------------|----------|----------|----------|

Principles and techniques of quality control and cost saving. Organization and procedure for efficient quality control. Functions, responsibilities, structure, costs, reports, records, personnel and vendor-customer relationships in quality control. Sampling inspections, process control and tests for significance.

| | | | |
|----------------------------------------|----------|----------|----------|
| ISC 207 Foremanship Supervision | 3 | 0 | 3 |
|----------------------------------------|----------|----------|----------|

The foreman's responsibility for planning, organizing, directing, controlling, and coordinating supervisory activities. It teaches the supervisor the basic functions of an organization and his responsibility in carrying out the objectives in accordance with the organization's plan. Included in the course are such topics as establishing lines of authority, functions of departments of units, duties and responsibilities, policies and procedures, and rules and regulations. Prerequisite: BUS 233.

| | | | |
|--------------------------------------------|----------|----------|----------|
| ISC 210 Job Analysis and Evaluation | 3 | 2 | 4 |
|--------------------------------------------|----------|----------|----------|

This study is based on product studies as well as personnel and wage program. The course utilizes the study of product design, value analysis, materials and processes as an intricate part of productive procedures.

| | | | |
|---------------------------------|----------|----------|----------|
| ISC 211 Work Measurement | 3 | 2 | 4 |
|---------------------------------|----------|----------|----------|

Principles of work simplification including administration of job methods improvement, motion study fundamentals and time study techniques. Use of flow and process charts, multiple activity charts, operation charts, flow diagrams and methods evaluation.

Prerequisite: ISC 210.

| | | | |
|------------------------------------|----------|----------|----------|
| ISC 220 Management Problems | 3 | 0 | 3 |
|------------------------------------|----------|----------|----------|

A study of personnel and production problems from the standpoint of the executive. Includes selection and development of products, control problems and techniques, development of standards, employee-employer relations, developing the executive staff. Case studies are utilized.

Prerequisites: BUS 222, ISC 120.

ISC 231 Manufacturing Cycles 5 0 5

Purchasing and distribution costs; consumption patterns; channels of distribution; marketing of consumer goods; shopping, specialty, agricultural and industrial goods; service marketing; functional middlement; speculation and hedging; wholesaling; shipping and warehousing; exporting and trade movements; standardization and grading; pricing, government regulation of competition; sales promotional activities; merchandising practices.

ISC 235 Industrial Management Seminar 1 2 2

A course designed to offer the student an opportunity to discuss and solve "on the job" problems presented to them by management personnel from industry. Major emphasis will be placed on guest speakers who are required to deal daily in the various subject areas which have been studied previously.

MAT 101 Technical Mathematics 5 0 5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

MAT 102 Technical Mathematics 5 0 5

A continuation of MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions, the binomial expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth.

Prerequisite: MAT 101.

MAT 103 Technical Mathematics 5 0 5

The fundamental concepts of analytical geometry, differential and integral calculus are introduced. Topics included are graphing techniques, geometric and algebraic interpretation of the derivative, differentials, rate of change, the integral and basic integration techniques. Applications of these concepts to practical situations are stressed.

Prerequisite: MAT 102.

MAT 110 Business Mathematics 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

MEC 101 Machine Processes 1 6 3

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

MEC 102 Machine Processes 1 6 3

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: MEC 101.

MEC 103 Machine Processes 2 3 3

A continued study of the advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: MEC 102.

MEC 205 Strength of Materials 2 3 3

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and spheres, riveted and welded joints, beams, columns and machine components.

Prerequisites: PHY 106, MAT 103.

MEC 210 Physical Metallurgy 3 3 4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: PHY 101.

MEC 211 Physical Metallurgy 3 3 4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations.

Prerequisite: MEC 210.

MEC 213 Production Planning 3 0 3

Day-to-day plant direction; forecasting, product planning and control, scheduling, dispatching, routing, and inventory control. Case histories are discussed in the classroom, and courses of corrective action are developed. Actual layouts are utilized for planning and control.

MEC 235 Hydraulics and Pneumatics 3 3 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: PHY 102.

PHY 101 Physics: Properties of Matter 3 2 4

A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course.

PHY 102 Physics: Work, Power, Energy 3 2 4

The major areas covered in this course are work, power, and energy. Instruction includes such topics as statics, forces, center of gravity, and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathematical formulas.

Prerequisites: PHY 101, MAT 101.

PHY 103 Physics: Work, Energy, & Power 3 2 4

A continuation of PHY 102 with a more indepth study of statics, forces, gravity, and dynamics. Essential mathematical formulas will be stressed in the practical applications of the theory covered in PHY 102.

Prerequisite: PHY 102.

PHY 106 Physics: Applied Mechanics 3 2 4

Concepts and principles of statics and dynamics. Parallel concurrent and non-current force streams in coplanar and noncoplanar situations. Concepts of centroids and center of gravity, moments of inertia, fundamentals of kinetics, and kinematics of velocity and motion.

Prerequisites: MAT 103, PHY 102.

PSY 112 Personal Development 3 0 3

Designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Emphasis is placed on grooming and methods of personality improvement.

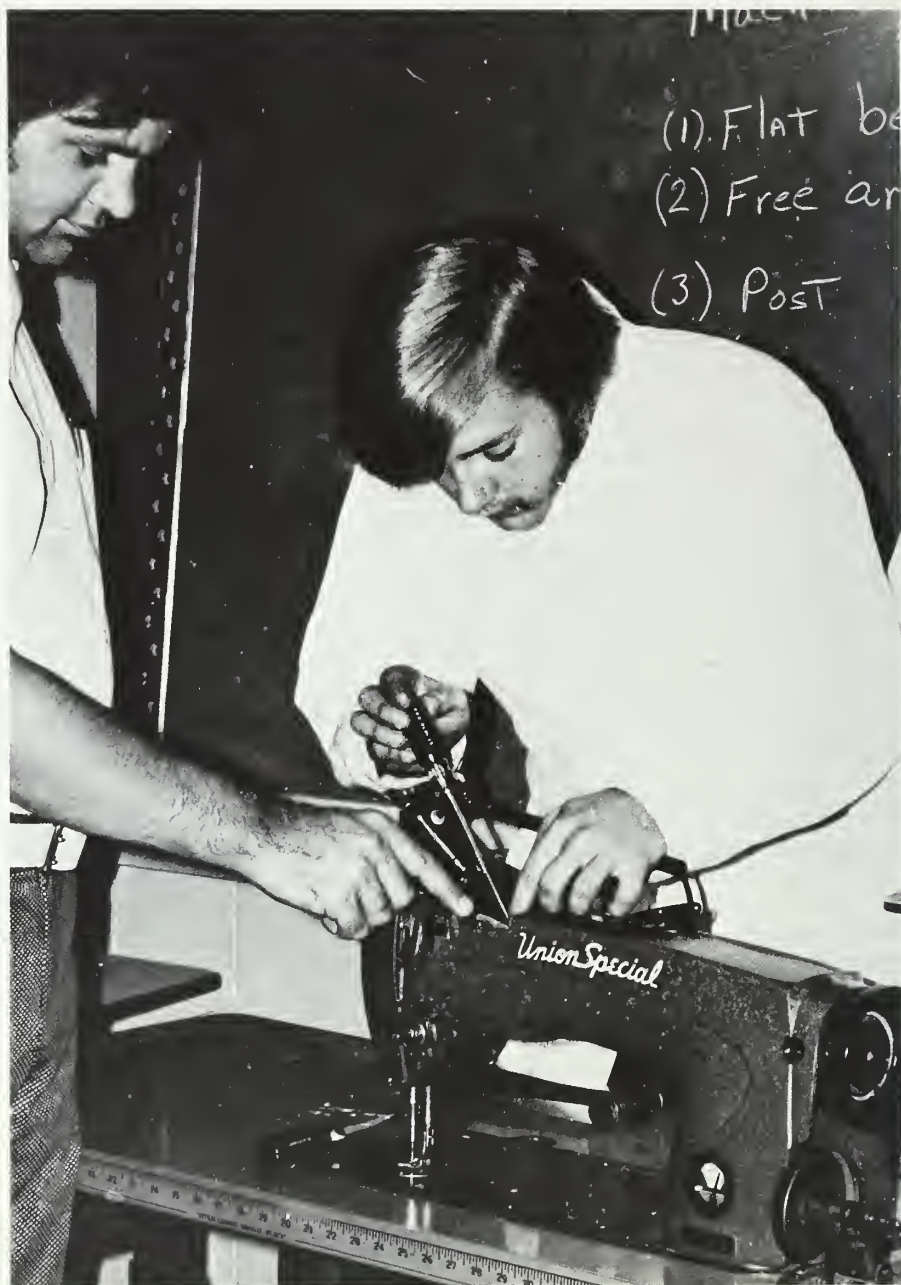
PSY 206 Applied Psychology 3 0 3

A study of the principles of psychology that will be of assistance in the understanding of interpersonal relations on the job. Motivation, feelings and emotions are considered with particular reference to on-the-job problems. Other topics investigated are: employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.

SSC 201 Social Science 3 0 3

An integrated course in the social sciences, drawing from the fields of anthropology, psychology, history, and sociology.

VOCATIONAL DIPLOMA PROGRAMS



AIR CONDITIONING AND REFRIGERATION

INTRODUCTION

In recent years the use of air conditioning and refrigeration equipment has increased tremendously. Practically all new building construction for business and commercial use has "all year" comfort systems. Many homes now have air conditioning and the trend is toward greater use of "all year" systems of cooling and heating. The food industry is requiring greater use of refrigeration systems in freezing, storage, and display of products. With this great up-swing in the use of air conditioning and refrigeration equipment, a greater demand is made on trained personnel to install, operate, maintain and service this equipment.

PURPOSE

This curriculum is designed to give the students practical knowledge that will enable them to become capable service men in the industry. The principle objective has been to outline the required technical and related instruction to enable them to understand the basic principles involved in the construction, operation, and maintenance of equipment. Job opportunities exist with companies that specialize in air conditioning, automatic heating, sheet metal, and commercial refrigeration installation and service. The service man is employable in areas of sales, maintenance, installation and in the growing fields of truck and trailer refrigeration.

JOB DESCRIPTION

The air conditioning and refrigeration mechanic installs, inspects, maintains, services and repairs domestic and commercial equipment; connects motors, compressors, temperature controls, humidity controls, and circulating fans to control panels; tests systems, observes pressure and vacuum gauges, and adjusts controls to insure proper operation.

AIR CONDITIONING AND REFRIGERATION

| | | | <i>Hours Per Week</i> | | <i>Quarter</i> |
|-----------------------|------|---------------------------------------|-----------------------|------------|----------------|
| | | | <i>Class</i> | <i>Lab</i> | <i>Hours</i> |
| | | | | | <i>Credit</i> |
| FALL QUARTER | | | | | |
| AHR | 1121 | Principles of Refrigeration | 3 | 12 | 7 |
| MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 5 |
| PHY | 1101 | Applied Science | 3 | 2 | 4 |
| DFT | 1116 | Blueprint Reading: Air Conditioning | 2 | 3 | 3 |
| | | | 13 | 17 | 19 |
| WINTER QUARTER | | | | | |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| AHR | 1122 | Domestic and Commercial Refrigeration | 3 | 12 | 7 |
| AHR | 1127 | Intro. To Automatic Controls | 5 | 0 | 5 |
| PHY | 1102 | Applied Science (Electricity) | 3 | 2 | 4 |
| | | | 16 | 14 | 21 |

| | | | <i>Hours Per Week</i> | <i>Quarter Hours</i> | |
|-----------------------|------|----------------------------------------------|-----------------------|----------------------|---------------|
| | | | <i>Class</i> | <i>Lab</i> | <i>Credit</i> |
| SPRING QUARTER | | | | | |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| AHR | 1123 | Principles of Air Conditioning | 3 | 9 | 6 |
| AHR | 1128 | Automatic Controls | 3 | 6 | 5 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| WLD | 1103 | Basic Gas Welding | <u>0</u> | <u>3</u> | <u>1</u> |
| | | | 12 | 18 | 18 |
| SUMMER QUARTER | | | | | |
| AHR | 1124 | Air Conditioning and Refrigeration Servicing | 3 | 6 | 5 |
| AHR | 1126 | All Year Comfort Systems | 3 | 6 | 5 |
| MEC | 1120 | Duct Construction and Maintenance | 3 | 6 | 5 |
| BUS | 1103 | Small Business Operations | <u>3</u> | <u>0</u> | <u>3</u> |
| | | | 12 | 18 | 18 |

AUTOMOTIVE MECHANICS

INTRODUCTION

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks, buses, and a variety of gasoline-powered equipment. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

PURPOSE

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, adjust, and repair automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussion, and shop practice. Specific objectives of the Automotive mechanics curriculum are to develop the following competencies:

1. Understanding of the principles of operation of the internal combustion engine to include mathematics and physics as they apply;
2. Develop ability to read and understand blueprints, sketches, and drawings of all automotive systems;
3. Introduction to welding for automotive mechanics;
4. Knowledge of human relations, business communications, and an introduction to small business operations.

JOB DESCRIPTION

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they may also service tractors, marine engines, and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They are responsible for the use of shop manuals and other technical publications.

Automotive mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. In larger shops, mechanics may specialize in one particular area; i. e., engine tuneups, transmissions, power equipment, etc.

AUTOMOTIVE MECHANICS

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|------------------------------------------------------------|-----------------------|------------|-----------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 5 |
| DFT | 1101 | Schematics and Diagrams (Engines, Measurements, and Tools) | 3 | 2 | 4 |
| PME | 1101 | Internal Combustion Engines | <u>5</u> | <u>15</u> | <u>10</u> |
| | | | 13 | 17 | 19 |
| WINTER QUARTER | | | | | |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| PHY | 1101 | Applied Science (Automotive Related) | 3 | 2 | 4 |
| DFT | 1102 | Schematic and Diagrams (Electrical and Fuel Systems) | 3 | 2 | 4 |
| PME | 1102 | Engine Electrical and Fuel Systems | <u>3</u> | <u>12</u> | <u>7</u> |
| | | | 14 | 16 | 20 |
| SPRING QUARTER | | | | | |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| PHY | 1102 | Applied Science (Automotive Related) | 3 | 2 | 4 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| AHR | 1101 | Automotive Air Conditioning | 2 | 3 | 3 |
| AUT | 1123 | Automotive Chassis and Suspension Systems | <u>2</u> | <u>12</u> | <u>6</u> |
| | | | 13 | 17 | 19 |
| SUMMER QUARTER | | | | | |
| BUS | 1103 | Small Business Operation | 3 | 0 | 3 |
| AUT | 1121 | Automotive Braking Systems | 1 | 6 | 3 |
| AUT | 1124 | Automotive Power Train Systems | 3 | 12 | 7 |
| WLD | 1101 | Basic Welding | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 9 | 21 | 16 |

CARPENTRY

INTRODUCTION

Carpentry is one of the basic trades in the construction field. Carpenters construct, erect, install, and repair structures of wood, plywood, and wallboard, using hand and power tools. The work must conform to local building codes for both residential and commercial structures.

PURPOSE

The Carpentry curriculum is designed to provide the essential training in, and knowledge of the basic carpentry skills which will allow the graduate to be immediately effective upon entering the trade. Additional objectives of the Carpentry curriculum are to develop the following competencies:

1. Skill in the use and maintenance of hand and power tools;
2. Blueprint reading, methods of construction, carpentry mathematics, and building codes;
3. Understanding of the principles of layout, concrete form construction, scaffolding, cabinetmaking and millwork, and finishing.

JOB DESCRIPTION

The carpenter constructs, erects, installs, and repairs structures and fixtures of wood, plywood, wall board and other materials, using carpenters handtools and power tools to conform to local building codes. He is required to use blueprints, sketches, or building plans for information pertaining to type of material, dimensions, layout and design of structure, and method of construction.

CARPENTRY

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|-------------------------------------------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| MAT | 1112 | Building Trades Math I (Carpentry) | 5 | 0 | 5 |
| CAR | 1101 | Carpentry: Tools, processes, and Introduction to Framing | <u>4</u> | <u>21</u> | <u>11</u> |
| | | | 9 | 21 | 16 |
| WINTER QUARTER | | | | | |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| DFT | 1110 | Blueprint Reading: Building Trades | 3 | 2 | 4 |
| MAT | 1113 | Building Trades Math II (Carpentry) | 5 | 0 | 5 |
| CAR | 1102 | Carpentry: Framing | <u>3</u> | <u>12</u> | <u>7</u> |
| | | | 16 | 14 | 21 |
| SPRING QUARTER | | | | | |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| CAR | 1103 | Carpentry: Finishing | 4 | 15 | 9 |
| DFT | 1111 | Blueprint Reading and Sketching | <u>3</u> | <u>2</u> | <u>4</u> |
| | | | 13 | 17 | 19 |
| SUMMER QUARTER | | | | | |
| BUS | 1103 | Small Business Operations | 3 | 0 | 3 |
| CAR | 1114 | Building Codes | 3 | 0 | 3 |
| CAR | 1104 | Carpentry: Cabinetmaking | 4 | 15 | 7 |
| CIV | 1101 | Introduction to Surveying | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 12 | 18 | 16 |

COSMETOLOGY

Cosmetologists advise men and women on problems of make-up, diet, and care of the hair, skin, hands, and nails. Cosmetology has become a science consisting of the use of cosmetics based on scientific principles.

The Cosmetology curriculum is designed to prepare the student for employment in the field of cosmetology. Instruction and practice are provided in manicuring, shampooing, permanent waving, facials, massages, scalp treatments, hair cutting and styling. This curriculum is approved by the North Carolina State Board of Cosmetic Art Examiners.

A variety of job opportunities are available with cosmetic firms, beauty salons, department stores, etc.

COSMETOLOGY

| | | | Hours Per Week | Quarter Hours Credit | |
|----------------|------|-------------------------------|----------------|----------------------------|----|
| | | | Class | Lab | |
| FALL QUARTER | | | | | |
| COS | 1101 | Introduction to Cosmetology | 5 | 3 | 6 |
| COS | 1102 | Manicuring | 2 | 3 | 3 |
| COS | 1103 | Bacteriology | 5 | 3 | 6 |
| COS | 1104 | Hair Shaping | 2 | 9 | 5 |
| | | | 14 | 18 | 20 |
| WINTER QUARTER | | | | | |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| COS | 1111 | Hair Styling | 3 | 15 | 8 |
| COS | 1112 | Hair Coloring | 2 | 9 | 5 |
| | | | 8 | 24 | 16 |
| SPRING QUARTER | | | | | |
| COS | 1120 | Permanent Waving and Styling | 6 | 15 | 11 |
| COS | 1121 | Anatomy | 2 | 6 | 4 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| | | | 11 | 21 | 18 |
| SUMMER QUARTER | | | | | |
| COS | 1130 | Dermatology and Facial Makeup | 5 | 9 | 8 |
| COS | 1131 | Chemistry | 4 | 2 | 5 |
| COS | 1132 | Electricity and Light Therapy | 2 | 3 | 3 |
| COS | 1133 | Practicum | 2 | 6 | 4 |
| | | | 13 | 20 | 20 |



ELECTRICAL INSTALLATION AND MAINTENANCE

INTRODUCTION

The rapid expansion of the national economy and the increasing development of new electrical products is providing a growing need for qualified people to install and maintain electrical equipment. More and more tradesmen are required each year to replace those leaving the industry. It is expected that the demand for electrical tradesmen will continue to increase during the 1970's. The majority of the electrical tradesmen today are trained through apprenticeship or on-the-job training programs.

PURPOSE

This curriculum will provide a training program which will give the graduate a basic knowledge of electricity and the fundamentals and practices involved in the electrical trades. A large portion of the program is devoted to laboratory and shop instruction, which is designed to give the student practical knowledge and application experience in the fundamentals taught in class.

JOB DESCRIPTION

The graduate of the electrical trades program will be qualified to enter an electrical trade as an on-the-job trainee or apprentice, where he will assist in the planning, layout, installation, check out, and maintenance of systems in residential, commercial, or industrial areas. He will have an understanding of the fundamentals of the National Electrical Code regulations as related to wiring installations, electrical circuits, and the measurements of voltage, current, power, and power factor of single and polyphase alternating circuits. He will have a basic knowledge of motors and motor control systems; industrial electronic control systems; business procedures, organization, and practices; and communicative skills.

ELECTRICAL INSTALLATION AND MAINTENANCE

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|-----------------------------------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| MAT | 1115 | Electrical Mathematics | 5 | 0 | 5 |
| ELC | 1124 | Residential Wiring | 5 | 15 | 10 |
| DFT | 1110 | Blueprint Reading: Building Trades | <u>3</u> | <u>2</u> | <u>4</u> |
| | | | 13 | 17 | 19 |
| WINTER QUARTER | | | | | |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| DFT | 1113 | Blueprint Reading: Electrical | 3 | 2 | 4 |
| PHY | 1101 | Applied Science: Electrical | 3 | 2 | 4 |
| ELC | 1112 | Direct and Alternating Current | <u>6</u> | <u>9</u> | <u>9</u> |
| | | | 17 | 13 | 22 |
| SPRING QUARTER | | | | | |
| MAT | 1116 | Electrical Mathematics | 5 | 0 | 5 |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| ELC | 1113 | Direct and Alternating Current: Motors and Controls | <u>4</u> | <u>15</u> | <u>9</u> |
| | | | 15 | 15 | 20 |

SUMMER QUARTER

| | | |
|-----|------|----------------------------------|
| BUS | 1103 | Small Business Operations |
| ELC | 1125 | Commercial and Industrial Wiring |

| <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------------|-------------------------------------|
| <i>Class</i> | <i>Lab</i> | |
| 3 | 0 | 3 |
| <u>9</u> | <u>18</u> | <u>15</u> |
| 12 | 18 | 18 |

INDUSTRIAL MAINTENANCE ELECTROMECHANICAL

INTRODUCTION

North Carolina, in its tremendous industrial growth, has the need for highly skilled personnel to maintain machines that are controlled by electrical and fluid power devices.

PURPOSE

This curriculum is designed to prepare the student to repair and maintain machinery, electrical wiring and fixtures, and hydraulics and pneumatic devices found in industrial establishments. He uses blueprints and sketches, manuals and codes, and works with hand tools made for electricians and machinists. He diagnoses causes of malfunctions in industrial machines. He sets up and operates machine tools such as the lathe, milling machine, and drill press to repair or make machine parts. He installs machine parts, starts machines, observes operations, and inspects the machine with test instruments.

JOB DESCRIPTION

An industrial serviceman may be required to install, maintain, and service electrical and mechanical equipment. He should be able to follow directions from blueprints and sketches, use hand tools and metal working machines, and check the work with measuring and testing instruments. He operates metal working machines such as the lathe, milling machine, and drill press to make repairs. He uses the micrometer and calipers to verify dimensions. He assembles wires, insulation, and electrical components, using hand tools and soldering equipment. He tests electrical circuits and components to locate shorts, faulty connections, and defective parts, using test meters. He also inspects and tests hydraulic equipment after new installations or repairs.

INDUSTRIAL MAINTENANCE ELECTROMECHANICAL

FALL QUARTER

| | | |
|-----|-------|----------------------------------|
| DFT | 1104 | Blueprint Reading: Mechanical |
| MEC | 1101R | Machine Shop Theory and Practice |
| MAT | 1101 | Fundamentals of Mathematics |
| ENG | 1101 | Reading Improvement |
| PHY | 1101 | Applied Science (Mechanical) |

| <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------------|-------------------------------------|
| <i>Class</i> | <i>Lab</i> | |
| 3 | 2 | 4 |
| 4 | 6 | 6 |
| 5 | 0 | 5 |
| 5 | 0 | 5 |
| <u>3</u> | <u>2</u> | <u>4</u> |
| 20 | 10 | 24 |

WINTER QUARTER

| | | | Class | Lab | Hours Credit |
|-----|------|--------------------------------|----------|----------|-----------------|
| ELC | 1112 | Direct and Alternating Current | 6 | 9 | 9 |
| WLD | 1104 | Basic Welding and Cutting | 4 | 6 | 6 |
| DFT | 1113 | Blueprint Reading: Electrical | <u>3</u> | <u>2</u> | <u>4</u> |
| | | | 13 | 17 | 19 |

SPRING QUARTER

| | | | | | |
|-----|-------|----------------------------------------------|----------|----------|----------|
| ISC | 1101 | Industrial Safety | 3 | 0 | 3 |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| AHR | 1124 | Air Conditioning and Refrigeration Service | 4 | 12 | 8 |
| ELC | 1113A | Introduction to Electric Motors and Controls | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 15 | 15 | 20 |

SUMMER QUARTER

| | | | | | |
|-----|-------|------------------------------|----------|----------|----------|
| PLU | 1110 | Plumbing-Pipe Work | 5 | 3 | 6 |
| ELC | 1113B | Electric Motors and Controls | 3 | 3 | 4 |
| BUS | 1103 | Small Business Operations | 3 | 0 | 3 |
| MEC | 1133 | Mechanical Maintenance | <u>4</u> | <u>9</u> | <u>7</u> |
| | | | 15 | 15 | 20 |

MACHINIST

INTRODUCTION

This curriculum was prepared to meet a definite need for training of machinists. Surveys completed in North Carolina show that many of the existing industries lack time and facilities for training enough machinists to meet present and planned needs. Expanding industries already located in our State and new industries under development invariably express the need for skilled craftsmen who have the background knowledge and potential to advance.

PURPOSE

This guide is designed to give learners the opportunity to acquire basic skills and the related technical information necessary to gain employment and build a profitable career in the machine shop industry.

JOB DESCRIPTION

The machinist is a skilled metal worker who shapes metal parts by using machine tools and hand tools. His training and experience enable him to plan and carry through all the operations needed in turning out a machined product and to switch readily from one kind of product to another. A machinist is able to select the proper tools and material required for each job and to plan the cutting and finishing operations in their proper order so that he can complete the finished work according to blueprint or written specifications. He makes standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining. He often uses precision measuring instruments such as micrometers and gauges to measure the accuracy of his work to thousandths of an inch.

This skilled worker must be able to set up and operate most types of machine tools. The machinist also must know the composition of metals so that he can heat and quench cutting tools and parts to improve machinability. His wide knowledge enables him to turn a block metal into an intricate precise part.

MACHINIST

| | | | Hours Per Week | Quarter Hours Credit | |
|----------------|------|----------------------------------|----------------|----------------------|----------|
| | | | Class | Lab | |
| FALL QUARTER | | | | | |
| MEC | 1101 | Machine Shop Theory and Practice | 3 | 12 | 7 |
| MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 5 |
| DFT | 1104 | Blueprint Reading: Mechanical | 3 | 2 | 4 |
| PHY | 1101 | Applied Science | <u>3</u> | <u>2</u> | <u>4</u> |
| | | | 14 | 16 | 20 |
| WINTER QUARTER | | | | | |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| MEC | 1102 | Machine Shop Theory and Practice | 3 | 12 | 7 |
| MAT | 1123 | Machinist Mathematics | 3 | 2 | 4 |
| DFT | 1105 | Blueprint Reading: Mechanical | <u>3</u> | <u>2</u> | <u>4</u> |
| | | | 14 | 16 | 20 |
| SPRING QUARTER | | | | | |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| MEC | 1103 | Machine Shop Theory and Practice | 4 | 15 | 9 |
| MEC | 1115 | Treatment of Ferrous Metals | 2 | 3 | 3 |
| PSY | 1101 | Human Relations | <u>3</u> | <u>0</u> | <u>3</u> |
| | | | 12 | 18 | 18 |
| SUMMER QUARTER | | | | | |
| MEC | 1104 | Machine Shop Theory and Practice | 2 | 15 | 7 |
| MEC | 1116 | Treatment of Non-Ferrous Metals | 2 | 3 | 3 |
| WLD | 1101 | Basic Welding | 2 | 3 | 3 |
| BUS | 1103 | Small Business Operations | <u>3</u> | <u>0</u> | <u>3</u> |
| | | | 9 | 21 | 16 |

MASONRY

INTRODUCTION

Masons are the craftsmen in the building trades that work with artificial stone, brick, concrete masonry units and stone. During the past decade there has been a steady increase in the demand for these craftsmen. As building construction continues to increase, the demand for bricklayers, cement masons, and stone masons will also increase.

PURPOSE

The Masonry curriculum is designed to provide the essential training in and knowledge of the basic masonry skills which will allow the graduate to be immediately effective upon entering the trade. Additionally, other objectives of the Masonry curriculum are to develop the following competencies:

1. Blueprint reading and job layout;
2. Understanding and appreciation of masonry mathematics;
3. Skill and understanding of masonry estimating;
4. Develop speed and accuracy required in actual construction.

JOB DESCRIPTION

The duties and responsibilities of masons include job layout from blueprints, foundation preparation, and laying of brick, block, tile, and stone in residential and commercial construction. After gaining experience in the various types of the masonry trade along with leadership training it is possible for the tradesman to become a foreman, inspector, and eventually a contractor.

MASONRY

| | | | <i>Hours Per Week</i> | <i>Quarter</i> |
|-----------------------|------|------------------------------------|-----------------------|----------------|
| | | | <i>Class</i> | <i>Hours</i> |
| | | | <i>Lab</i> | <i>Credit</i> |
| FALL QUARTER | | | | |
| MAT | 1112 | Building Trades Math I (Masonry) | 5 | 0 |
| MAS | 1101 | Bricklaying I | <u>4</u> | <u>21</u> |
| | | | 9 | 16 |
| WINTER QUARTER | | | | |
| DFT | 1110 | Blueprint Reading: Building Trades | 3 | 2 |
| ENG | 1101 | Reading Improvement | 5 | 0 |
| MAT | 1113 | Building Trades Math II (Masonry) | 5 | 0 |
| MAS | 1102 | Bricklaying II | <u>3</u> | <u>12</u> |
| | | | 16 | 14 |
| SPRING QUARTER | | | | |
| ENG | 1102 | Communication Skills | 3 | 0 |
| PSY | 1101 | Human Relations | 3 | 0 |
| MAS | 1103 | General Masonry | <u>6</u> | <u>18</u> |
| | | | 12 | 18 |
| SUMMER QUARTER | | | | |
| CIV | 1101 | Introduction to Surveying | 2 | 3 |
| MAS | 1104 | General Masonry | 4 | 18 |
| BUS | 1103 | Small Business Operations | <u>3</u> | <u>0</u> |
| | | | 9 | 21 |

PRACTICAL NURSING

INTRODUCTION

The accelerated growth of population in North Carolina and rapid advancement in medical technology demand an increased number of well-trained personnel for health services. Realizing this need, the North Carolina Department of Community Colleges, in conjunction with local hospitals, administers programs of practical nurse education throughout the state.

Students are selected on the basis of demonstrated aptitude for nursing, as determined by pre-entrance tests, interviews with faculty members, high school record, character references, and reports of medical and dental examinations.

Graduates of accredited programs of Practical Nurse Education are eligible to take the licensing examinations given by the North Carolina Board of Nursing. This examination is given twice each year, usually in April and September. A passing score entitles the individual to receive a license and to use a legal title "Licensed Practical Nurse." The license must be renewed annually. The Licensed Practical Nurse can apply for licensure in other states on the basis of a satisfactory examination score, without repeating the examination.

PURPOSE

The aim of the Practical Nurse Education program is to prepare qualified persons for participation in care of patients of all ages, in various states of dependency, and with a variety of illness conditions.

Throughout the one-year program the student is expected to continuously acquire knowledge and understanding related to nursing and the biological and social sciences and to develop skills related to nursing practice, communications, interpersonal relations, and use of good judgment. Evaluation of student performance consists of tests on all phases of course content, evaluation of clinical performance, and evaluation of adjustment to the responsibilities of nursing. A passing score is required on all graded work, plus demonstrated progress in application of nursing skills to actual patient care.

A graduate of the Licensed Practical Nurse program will have suitable personal characteristics, ability to adapt knowledge and understanding of nursing principles to a variety of situations, technical skills for performance of bedside nursing, appreciation for differences of people and for the worth of every individual, a desire to serve and to help others, and readiness to conform to the requirements of nursing ethics and hospital policies.

JOB DESCRIPTION

The Licensed Practical Nurse is prepared to function in a variety of situations: hospitals of all types, nursing homes, clinics, doctors' and dentists' offices, and in some localities, public health facilities. In all situations the LPN functions under supervision of a registered nurse and/or licensed physician. This supervision may be minimal in situations where the patient's condition is stable and not complex; or it may consist of continuous direction in situations requiring the knowledge and skills of the registered nurse or physician. In the latter situation, the LPN may function in an assisting role in order to avoid assuming responsibility beyond that for which the one-year program can prepare the individual.



PRACTICAL NURSING

| | | | <i>Hours</i> | <i>Per</i> | <i>Quarter</i> | <i>Contact</i> | <i>Quarter</i> |
|-----------------------|------|-----------------------------------|---------------|------------|----------------|--------------------|----------------|
| | | | <i>Class/</i> | <i>Lab</i> | <i>Clinic</i> | <i>Hours</i> | <i>Hours</i> |
| | | | | | | <i>Per Quarter</i> | <i>Credit</i> |
| FALL QUARTER | | | | | | | |
| NUR | 1101 | Fundamentals of Practical Nursing | 55 | 42 | *60 | 157 | 8 |
| NUR | 1102 | Body Structure & Function | 55 | 28 | 0 | 83 | 6 |
| MAT | 1105 | Math for Nurses | 55 | 0 | 0 | 55 | 5 |
| ENG | 1101 | Reading Improvement | 55 | 0 | 0 | 55 | 5 |
| | | | 220 | 70 | *60 | 350 | 24 |
| WINTER QUARTER | | | | | | | |
| NUR | 1107 | Medical Surgical Nursing I | 44 | 22 | 264 | 330 | 13 |
| NUR | 1111 | Drug Administration | 11 | 11 | 0 | 22 | 2 |
| NUR | 1105 | Nutrition | 33 | 0 | 0 | 33 | 3 |
| | | | 88 | 33 | 264 | 385 | 18 |
| SPRING QUARTER | | | | | | | |
| NUR | 1110 | Medical Surgical Nursing II | 77 | 22 | 176 | 275 | 13 |
| PSY | 1101 | Human Relations | 33 | 0 | 0 | 33 | 3 |
| NUR | 1114 | Family Units | 33 | 0 | 0 | 33 | 3 |
| | | | 143 | 22 | 176 | 341 | 19 |
| SUMMER QUARTER | | | | | | | |
| NUR | 1108 | Obstetric-Pediatric Nursing | 50 | 20 | 240 | 310 | 14 |
| NUR | 1116 | Vocational Adjustment | 20 | 0 | 0 | 20 | 2 |
| NUR | 1120 | Nursing Skills Seminar | 20 | 0 | 0 | 20 | 2 |
| | | | 90 | 20 | 240 | 350 | 18 |

*Last Four (4) Weeks of Quarter

RADIO, TELEVISION AND ELECTRONIC SERVICING

INTRODUCTION

Within recent years, improved electronic techniques have provided expanded entertainment and educational facilities in the form of monochrome and color television, frequency modulated radio, high fidelity amplifiers, and stereophonic sound equipment. These developments require expanded knowledge and skill of the individual who would qualify as a competent and up-to-date serviceman.

PURPOSE

This curriculum guide provides a training program which will provide the basic knowledge and skills involved in the installation, maintenance and servicing of radio, television, and sound amplifier system. A large portion of time is spent in the laboratory verifying electronic principles and developing servicing techniques.

JOB DESCRIPTION

A radio and television serviceman may be required to install, maintain, and service amplitude modulated and frequency modulated home and auto radios, transistorized radios, monochrome and color television sets, intercommunication, public address and paging systems, high fidelity and stereophonic amplifiers, record players, and tape recorders.

His work will require meeting the public both in the repair shop and on service calls. A serviceman who establishes his own business will also need to know how to maintain business records and inventory.

RADIO, TELEVISION AND ELECTRONIC SERVICING

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|-------|-------------------------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| MAT | 1115 | Electrical Mathematics | 5 | 0 | 5 |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| ELC | 1112R | Direct and Alternating Current | <u>8</u> | <u>12</u> | <u>12</u> |
| | | | 18 | 12 | 22 |
| WINTER QUARTER | | | | | |
| MAT | 1116 | Electrical Mathematics | 5 | 0 | 5 |
| ELN | 1122 | Vacuum Tubes and Electronic Circuits | 5 | 12 | 9 |
| ELN | 1123 | Amplifier Systems | <u>2</u> | <u>6</u> | <u>4</u> |
| | | | 12 | 18 | 18 |
| SPRING QUARTER | | | | | |
| ENG | 1102 | Communicative Skills | 3 | 0 | 3 |
| ELN | 1126 | Transistor Theory and Electronic Circuits | 3 | 9 | 6 |
| ELN | 1125 | Radio Receiver Servicing | 3 | 9 | 6 |
| PSY | 1101 | Human Relations | <u>3</u> | <u>0</u> | <u>3</u> |
| | | | 12 | 18 | 18 |
| SUMMER QUARTER | | | | | |
| ELN | 1127 | Television Receiver Circuits & Servicing | 10 | 17 | 15 |
| BUS | 1103 | Small Business Operations | <u>3</u> | <u>0</u> | <u>3</u> |
| | | | 13 | 17 | 18 |

WELDING

INTRODUCTION

This curriculum was developed to fill the tremendous need for welders in North Carolina. The recently completed Manpower Survey shows quite clearly that many welders will be needed annually to fill present and projected vacancies in the State.

The field of welding offers a person prestige, security, and a future of continuous employment with steady advancement. It offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, railroads, construction, pipe fitting, production shop, job shop, and many others.

PURPOSE

The content of this curriculum is designed to give students sound understanding of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry.

Objectives of the Welding curriculum are to develop the following competencies:

1. Understanding the principles of operation of oxyacetylene, arc, and inert gas welding;

2. Thorough development of all manual welding skills and related testing, inspection, and certification practices;
3. Understanding of the physics and mathematics applicable to welding;
4. Ability to read and interpret blueprints, drawings, mechanical patterns, and sketches;
5. Knowledge of human relations and business communication.

JOB DESCRIPTION

Welders join metals by applying intense heat, and sometimes pressure, to melt the edges to form a permanent bond. Closely related to welding is "oxygen cutting." Of the more than 35 different ways of welding metals, arc, gas, and resistance welding are the three most important.

The principal duty of the welder using manual techniques is to control the melting by directing the heat from either an electric arc or gas welding torch, and to add filler metal where necessary to complete the joint. He should possess a great deal of manipulative skill with a knowledge of jigs, welding symbols, mathematics, basic metallurgy, and blueprint reading.

WELDING

| | | | <i>Hours Per Week</i> | | <i>Quarter Hours Credit</i> |
|-----------------------|------|----------------------------------------------|-----------------------|------------|-------------------------------------|
| | | | <i>Class</i> | <i>Lab</i> | |
| FALL QUARTER | | | | | |
| PHY | 1101 | Applied Science (Welding Related) | 3 | 2 | 4 |
| DFT | 1104 | Blueprint Reading: Mechanical | 3 | 2 | 4 |
| WLD | 1120 | Oxyacetylene Welding & Cutting | <u>5</u> | <u>15</u> | <u>10</u> |
| | | | 11 | 19 | 18 |
| WINTER QUARTER | | | | | |
| ENG | 1101 | Reading Improvement | 5 | 0 | 5 |
| MAT | 1101 | Fundamentals of Mathematics | 5 | 0 | 5 |
| WLD | 1121 | Arc Welding | 3 | 9 | 6 |
| DFT | 1117 | Blueprint Reading: Advanced | 2 | 2 | 3 |
| WLD | 1112 | Mechanical Testing & Certification Practices | <u>1</u> | <u>3</u> | <u>2</u> |
| | | | 16 | 14 | 21 |
| SPRING QUARTER | | | | | |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| WLD | 1126 | Advanced Arc Welding | 2 | 15 | 7 |
| WLD | 1123 | Inert Gas Welding | 2 | 3 | 3 |
| DFT | 1118 | Pattern Development & Sketching | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 9 | 21 | 16 |
| SUMMER QUARTER | | | | | |
| WLD | 1124 | Pipe Welding | 4 | 12 | 8 |
| WLD | 1122 | Commercial & Industrial Practices | 3 | 6 | 5 |
| MEC | 1112 | Machine Shop Processes | <u>2</u> | <u>3</u> | <u>3</u> |
| | | | 9 | 21 | 16 |

COURSE DESCRIPTIONS

VOCATIONAL DIPLOMA PROGRAMS

The following section provides a brief description for each course listed in the previous section. Courses are listed alphabetically by prefix and arranged in ascending order by number (e.g., AUT 1121, AUT 1123, BUS 1103, DFT 1102, etc.).

The numbers given on the right side of the page (3 2 4) indicate the following: First number gives the hours per week of lecture, second number gives the hours per week of laboratory or shop, and the third number indicates the quarter hour credit for that one course.

| | | | | |
|-----------------|------------------------------------|---|---|---|
| AHR 1101 | Automotive Air Conditioning | 2 | 3 | 3 |
|-----------------|------------------------------------|---|---|---|

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system.

| | | | | |
|-----------------|------------------------------------|---|----|---|
| AHR 1121 | Principles of Refrigeration | 3 | 12 | 7 |
|-----------------|------------------------------------|---|----|---|

An introduction to the principles of refrigeration, terminology, the use and care of tools and equipment, and the identification and the function of the component parts of a system. Other topics to be included will be the basic laws of refrigeration; characteristics and comparison of the various refrigerants; the use and construction of valves, fittings, and basic controls. Practical work includes tube bending, flaring and soldering. Standard procedures and safety measures are stressed in the use of special refrigeration service equipment and the handling of refrigerants.

| | | | |
|-------------------------------------------------------|----------|-----------|----------|
| AHR 1122 Domestic and Commercial Refrigeration | 3 | 12 | 7 |
|-------------------------------------------------------|----------|-----------|----------|

Domestic refrigeration servicing of conventional, hermetic, and absorption systems. Cabinet care, controls, and system maintenance in domestic refrigeration, freezers, and window air conditioning units is stressed. Commercial refrigeration servicing of display cabinets, walk-in cooler and freezer units, and mobile refrigeration systems is studied. The use of manufacturers' catalogs in sizing and matching system components and a study of controls, refrigerants, servicing methods is made. The American Standard Safety Code for Refrigeration is studied and its principles practiced.

Prerequisite: AHR 1121.

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|-----------------|---------------------------------------|---|---|---|
| AHR 1123 | Principles of Air Conditioning | 3 | 9 | 6 |
|-----------------|---------------------------------------|---|---|---|

Work includes the selection of various heating, cooling and ventilating systems, investigation and control of factors affecting air cleaning, movement, temperature, and humidity. Use is made of psychrometric charts in determining needs to produce optimum temperature and humidity control. Commerical air conditioning equipment is assembled and tested. Practical sizing and balancing of ductwork is performed as needed.

Prerequisite: AHR 1122.

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|-----------------|-----------------------------------------------------|----------|-----------|----------|
| AHR 1124 | Air Conditioning and Refrigeration Servicing | 4 | 12 | 8 |
|-----------------|-----------------------------------------------------|----------|-----------|----------|

Emphasis is placed upon the principles of air conditioning and refrigeration

and trouble shooting of the mechanical and electrical problems involved. Components and systems controls are studied from the standpoint of installation, performance, and service. Test instruments are discussed and systems adjustments are stressed.

AHR 1126 All Year Comfort Systems 3 6 5

Auxiliary equipment used in conjunction with refrigeration systems to provide both heating and cooling for "all year" comfort will be studied and set up in the laboratory. Included will be oil fired systems, gas fired systems, water circulating systems, and electric-resistance systems. Installation of heat pumps will be studied along with servicing techniques. Reversing valves, special types of thermostatic expansion, valves, systems of de-icing coils, and electric wiring and controls are included in the study.

Prerequisites: AHR 1123, AHR 1128.

AHR 1127 Intro. to Automatic Controls 5 0 5

An introduction to various types of automatic, electric, and penumatic controls utilized for domestic and commercial cooling and heating units. Primary emphasis on design and function.

AHR 1128 Automatic Controls 3 6 5

Major emphasis will be placed on the installation, repair, and servicing of types of automatic controls in air conditioning systems. Included in the course will be electric and pneumatic controls for domestic and commercial cooling and heating; zone controls, unit heater and ventilator controls, commercial fan systems controls, commercial refrigeration controls, and radiant panel controls.

Prerequisites: AHR 1122 and AHR 1127.

AUT 1121 Automotive Braking Systems 1 6 3

A complete study of various braking systems employed in automobiles and light weight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

AUT 1123 Automotive Chassis and Suspension Systems 2 12 6

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension, and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end alignment.

Prerequisite: PME 1102.

AUT 1124 Automotive Power Train Systems 3 12 7

Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

BUS 1103 Small Business Operation 3 0 3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

| | | | |
|-------------------------------------------------------------------------|---|----|----|
| CAR 1101 Carpentry: Tools, Processes and Introduction to Framing | 4 | 21 | 11 |
|-------------------------------------------------------------------------|---|----|----|

A brief history of carpentry and present trends of the construction industry. The course will involve operation care and safe use of carpenters' handtools and power-tools in cutting, shaping and joining construction materials used by the carpenter. Major topics of study will include theoretical and practical applications involving materials and methods of construction, building layout, preparation of site, footings and foundation wall construction, including form construction and erection.

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| CAR 1102 Carpentry: Framing | 3 | 12 | 7 |
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Instruction is given in the principles and practices of frame construction beginning with the foundation sills and including: floor joist, subfloor, wall studs, ceiling joist, rafters, bridging, bracing, sheathing and interior wall partition. Roof construction includes the layout and construction methods of common types of roofs using standard rafter construction, truss construction and post and beam construction. Application and selection of sheathing and roofing is included. Consideration is given to the coordination of carpentry work with installation of the mechanical equipment such as: electrical, air conditioning, heating, and plumbing.

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| CAR 1103 Carpentry: Finishing | 4 | 15 | 9 |
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Exterior and interior trim and finish carpentry will complete the general carpentry program. Included will be materials and methods used in finishing carpentry such as: exterior cornice, door and window trim; interior flooring, door and window facing, moldings, cornice construction, installation of hardware, and installation of built in equipment and cabinets.

| | | | |
|------------------------------------------|---|----|---|
| CAR 1104 Carpentry: Cabinetmaking | 4 | 15 | 7 |
|------------------------------------------|---|----|---|

Cabinetmaking and millwork as performed by the general carpenter for building construction. Use of shop tools and equipment will be emphasized in learning methods of construction of millwork and cabinetry. Practical applications will include measuring, layout and construction of: base and wall cabinets, built in desk, door and window frames, stairs, and interior and exterior cornice and trim. Materials and finishes will also be studied.

| | | | |
|--------------------------------|---|---|---|
| CAR 1114 Building Codes | 3 | 0 | 3 |
|--------------------------------|---|---|---|

A study is made of building codes and the minimum requirements for local, county, and state construction regulations. This involves safety, sanitation, mechanical equipment and materials. Also, a review will be made of the minimum property requirements of the Federal Housing Administration and the North Carolina State Code.

| | | | |
|----------------------------------------|---|---|---|
| CIV 1101 Introduction to Survey | 2 | 3 | 3 |
|----------------------------------------|---|---|---|

An introduction to the surveying instruments utilized in laying out construction sites. Emphasis will be placed on practical exercises and field trips to actual construction sites.

| | | | |
|---------------------------------------------|---|---|---|
| COS 1101 Introduction to Cosmetology | 5 | 3 | 6 |
|---------------------------------------------|---|---|---|

Designed to give the student a background for the profession and an understanding of the laws and civic responsibilities involved.

| | | | |
|----------------------------|---|---|---|
| COS 1102 Manicuring | 2 | 3 | 3 |
|----------------------------|---|---|---|

The care of the hands and nails with emphasis on correct procedures, techniques, materials, and equipment used in giving a manicure. Also attention devoted to developing an understanding of the relationship between customer and operator.

| | | | |
|------------------------------|---|---|---|
| COS 1103 Bacteriology | 5 | 3 | 6 |
|------------------------------|---|---|---|

A study of bacteriology to prevent the spread of disease in the shops, and instructions in sanitary measures and laws. Emphasis is placed on safety and methods of rendering first aid. Also instruction in health needs and habits of an individual.

| | | | |
|------------------------------|---|---|---|
| COS 1104 Hair Shaping | 2 | 9 | 5 |
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Skill in the use of scissors and razor for shaping the hair is developed in this course. The student becomes familiar with various methods of cutting hair which may be applied to specific hair styling and permanent waving.

| | | | |
|------------------------------|---|----|---|
| COS 1111 Hair Styling | 3 | 15 | 8 |
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This course deals with the fundamental principles of hair styling and wig care. Through study of the contour of the head and face a student learns to see the relationship of these features to various hair styles. Also extensive practice in the proper use of sculpture curls, brushing, and combing is included.

| | | | |
|-------------------------------|---|---|---|
| COS 1112 Hair Coloring | 2 | 9 | 5 |
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A study of techniques and applications involved in giving hair tints and bleaches; reaction of chemicals to certain textures of hair; composition, merits, and limitations of softeners, developers, hair tints, and bleaches.

| | | | |
|----------------------------------------------|---|----|----|
| COS 1120 Permanent Waving and Styling | 6 | 15 | 11 |
|----------------------------------------------|---|----|----|

This course is designed to provide a foundation for the practical art of permanent waving. Such topics as types of permanent waves, texture and elasticity of hair, and shaping of hair are included. Also the methods of permanent waving are taught.

| | | | |
|-------------------------|---|---|---|
| COS 1121 Anatomy | 2 | 6 | 4 |
|-------------------------|---|---|---|

The structure and function of the bones, muscles, and nerves with particular emphasis upon their application of cosmetology.

| | | | |
|------------------------------------------------|---|---|---|
| COS 1130 Dermatology and Facial Make-Up | 5 | 9 | 8 |
|------------------------------------------------|---|---|---|

Designed to aid in the understanding of the principles, techniques, purposes, application and benefits of facial massage and cosmetic use. The various types of facials appropriate for different types of skin studied. The cause, identification, and treatment of common skin disorders and scalp diseases.

| | | | |
|---------------------------|---|---|---|
| COS 1131 Chemistry | 4 | 2 | 5 |
|---------------------------|---|---|---|

Designed to give the student an understanding of the basic principles of chemistry as they apply to the field of cosmetology. The major areas of work studied in this course are: fundamentals of chemistry, chemistry of soaps, hair preparations, nail preparations, deodorant preparations, creams and lotions, and facial preparations.

| | | | |
|-----------------------------------------------|---|---|---|
| COS 1132 Electricity and Light Therapy | 2 | 3 | 3 |
|-----------------------------------------------|---|---|---|

Designed to acquaint the student to electricity in its different phases as applied to cosmetology. Such topics as wallplate, high frequency, and electrodes are studied and discussed. The use of heat and light in the treatment of scalp and facial disorders as applied to cosmetology will be covered.

| | | | |
|---------------------------|---|---|---|
| COS 1133 Practicum | 2 | 6 | 4 |
|---------------------------|---|---|---|

Practical application in the lab, under supervision, using all the principles, techniques, materials and supplies in all areas of cosmetology. Live practical work will be stressed.

| | | | |
|------------------------------------------------------------------------------|---|---|---|
| DFT 1101 Schematics and Diagrams (Electrical Measurements, and Tools) | 3 | 2 | 4 |
|------------------------------------------------------------------------------|---|---|---|

Interpretation and reading of blueprints, sketches and drawings. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and diagrams of engines and tools to include measurements in volume. Information on the basic principles of lines, views, dimensioning procedures, and notes.

| | | | |
|-----------------------------------------------------------------------|---|---|---|
| DFT 1102 Schematics and Diagrams (Electrical and Fuel Systems) | 3 | 2 | 4 |
|-----------------------------------------------------------------------|---|---|---|

Interpretation and reading of blueprints, sketches, and drawings. Development of ability to read, interpret, and understand blueprints, charts, instructions, and service manuals pertaining to automotive, electrical, and fuel systems. Views, dimensioning, and procedures will be stressed.

| | | | |
|-----------------------------------------------|---|---|---|
| DFT 1104 Blueprint Reading: Mechanical | 3 | 2 | 4 |
|-----------------------------------------------|---|---|---|

Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.

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|-----------------------------------------------|---|---|---|
| DFT 1105 Blueprint Reading: Mechanical | 3 | 2 | 4 |
|-----------------------------------------------|---|---|---|

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information and processes.

Prerequisite: DFT 1104.

| | | | |
|----------------------------------------------------|---|---|---|
| DFT 1110 Blueprint Reading: Building Trades | 3 | 2 | 4 |
|----------------------------------------------------|---|---|---|

Principles of interpreting blueprints and specifications common to the building trades. Development of proficiency in making three-view and pictorial sketches.

| | | | |
|-------------------------------------------------|---|---|---|
| DFT 1111 Blueprint Reading and Sketching | 3 | 2 | 4 |
|-------------------------------------------------|---|---|---|

Principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors and windows, and roofs of buildings. Development of proficiency in making three-view and pictorial sketches.

DFT 1113 Blueprint Reading: Electrical 3 2 4

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

Prerequisite: DFT 1110.

DFT 1116 Blueprint Reading: Air Conditioning 2 3 3

A specialized course in drafting for the heating, air conditioning and refrigeration student. Emphasis will be placed on reading of blueprints that are common to the trade: blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, heating system plans including duct and equipment layout plans, and shop sketches. The student will make tracings of floor plans and lay out air conditioning systems.

DFT 1117 Blueprint Reading & Pattern Development 2 2 3

A thorough study of trade drawings in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

DFT 1118 Pattern Development & Sketching 2 3 3

A study of the development of patterns which assist welders in preparing joints of all types. Students will prepare sketches from which cuts and joinings will be made. Emphasis will be placed on rectangular and cylindrical layouts.

DFT 1125 Descriptive Geometry 3 2 4

A study of the graphical analysis of figures. The problems deal with practical design elements involving points, lines, planes, connectors, and a combination of these. Where applicable, each graphical solution shall be accompanied by the analytical solution and visualization will be stressed on each problem.

DFT 1131 Basic Mechanical Drafting 2 3 3

An introductory course which begins the study of drawing principles and practices for print reading, and describing objects in graphic language. Basic drawing skills are practiced, using essential drafting equipment, including lettering, pictorial sketching, principle views, and dimensioning.

ELC 1112 Direct and Alternating Current 6 9 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. A study of the sources of direct current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

ELC 1112R Direct and Alternating Current 8 12 12

A study of the structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. Analysis of direct current circuits by Ohm's law and Kirchhoff's law;

sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis.

ELC 1113 Direct and Alternating Current: Motors and Controls 4 15 9

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, times, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

ELC 1113A Introduction to Electric Motors and Controls 2 3 3

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors.

ELC 1113B Electric Motors and Controls 3 3 4

Instruction in the use of electrical test instruments in circuit analysis of electric motors. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, times, or sequencing switches.

ELC 1124 Residential Wiring 5 15 10

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mock-ups.

ELC 1125 Commercial and Industrial Wiring 9 18 15

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Code, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

Prerequisite: ELC 1113.

ELN 1122 Vacuum Tubes and Electronic Circuits 5 12 9

An introduction to vacuum tubes and their development; the theory, characteristics and operation of vacuum diodes, semi-conductor diodes, rectifier circuits, filter circuits, triodes and simple voltage amplifier circuits.

Prerequisites: ELC 1112, MAT 1115.

ELN 1123 Amplifier Systems 2 6 4

An introduction of commonly used servicing techniques as applied to monophonic and stereophonic high fidelity amplifier systems and auxiliary equipment. The operation and servicing of intercommunication amplifiers and switching circuits will also be taught.

Prerequisites: MAT 1115, ELC 1112.

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| ELN 1125 Radio Receiver Servicing | 3 | 9 | 6 |
|------------------------------------------|----------|----------|----------|

Principles of radio reception and practices of servicing; included are block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage analysis, oscilloscope methods of locating faulty stages and components and the alignment of AM and FM receivers.

Prerequisites: ELN 1123, ELN 1122.

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|-------------------------------------------------------------|----------|----------|----------|
| ELN 1126 Transistor Theory & Electronic Circuits | 3 | 9 | 6 |
|-------------------------------------------------------------|----------|----------|----------|

Transistor theory, operation, characteristics and their application to audio and radio frequency amplifier and oscillator circuits.

Prerequisite: ELN 1123.

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|--------------------------------------------------------------|-----------|-----------|-----------|
| ELN 1127 Television Receiver Circuits & Servicing | 10 | 17 | 15 |
|--------------------------------------------------------------|-----------|-----------|-----------|

A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of horizontal and vertical sweep circuits will be taught. Techniques of troubleshooting and repair of TV receivers with the proper use of associated test equipment will be stressed. Additional study of more specialized servicing techniques and oscilloscope waveform analysis will be used in the adjustment, troubleshooting, and repair of the color television circuits.

Prerequisites: ELN 1126, ELN 1125.

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| ENG 1101 Reading Improvement | 5 | 0 | 5 |
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Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and to train for comprehension in larger units.

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| ENG 1102 Communications Skills | 3 | 0 | 3 |
|---------------------------------------|----------|----------|----------|

Designed to promote effective communication through correct language usage in speaking and writing.

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|-----------------------------------|----------|----------|----------|
| ISC 1101 Industrial Safety | 3 | 0 | 3 |
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A study of the overall picture of the accident toll for the nation's population. It is designed to establish safe work habits in performing the occupation. Principles of accident prevention; injury sources and causes; accident costs; job safety analysis; accident investigation; methods of promoting safe practice, safety education and training; first aid, lifting — manually and mechanically; and fire prevention and protection are some of the topics discussed.

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| MAS 1101 Bricklaying | 4 | 21 | 11 |
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The history of the bricklaying industry. Clay and shell brick, mortar, laying foundations, laying bricks to a line, bonding, and tools and their uses. Laboratory work will provide training in the basic manipulative skills.

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| MAS 1102 Bricklaying | 3 | 12 | 7 |
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Designed to give the student practice in selecting the proper mortars, layout, and construction of various building elements such as foundations, walls, chimneys, arches and cavity walls. The proper use of bonds, expansion strips, walls, ties, and caulking methods are stressed.

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----|----|
| MAS 1103 General Masonry | 6 | 18 | 12 |
| Layout and erection of reinforced grouted brick masonry lintels, fireplaces, glazed tile, panels, decorative stone, granite, marble, adhesive terra cotta, and modular masonry construction theory and techniques. | | | |
| MAS 1104 General Masonry | 4 | 18 | 10 |
| Major emphasis will be placed upon speed and accuracy utilizing the practices and principles learned in MAS 1101, MAS 1102, and MAS 1103. | | | |
| MAT 1101 Fundamentals of Mathematics | 5 | 0 | 5 |
| Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth. | | | |
| MAT 1105 Mathematics for Nurses | 5 | 0 | 5 |
| Study and practice of basic arithmetic procedures, common and decimal fractions, percentages, ratio and proportion, Roman numerals, metric and apothecaries systems of weights and measures, Fahrenheit and centigrade scales, solution and dosages. | | | |
| MAT 1112 Building Trade Mathematics | 5 | 0 | 5 |
| Practical problems dealing with volumes, weights, ratios; mensuration; and basic estimating practices for building materials. | | | |
| MAT 1113 Building Trades Mathematics | 5 | 0 | 5 |
| Practical problems dealing with volumes, weights, ratios; mensuration; and basic estimating practices for building materials. | | | |
| MAT 1115 Electrical Mathematics | 5 | 0 | 5 |
| A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current. | | | |
| MAT 1116 Electrical Mathematics | 5 | 0 | 5 |
| A working knowledge of the powers of 10, Ohm's Law for series and parallel circuits, quadratic equations, Kirchhoff's Law, trigonometric functions, plane vectors, alternating currents, vector algebra and logarithms. Prerequisite: MAT 1115. | | | |
| MAT 1123 Machinist Mathematics | 3 | 2 | 4 |
| Introduces gear ratio, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with experience in geometric propositions and trigonometric relations to shop problems; concludes with an introduction to compound angle problems. Prerequisite: MAT 1101. | | | |

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| MEC 1101 Machine Shop Theory and Practice | 3 | 12 | 7 |
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An introduction to the machinist trade and the potential it holds for craftsmen. Deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.

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|---------------------------------------------------|---|---|---|
| MEC 1101R Machine Shop Theory and Practice | 4 | 6 | 6 |
|---------------------------------------------------|---|---|---|

An introduction to the machinist trade and the potential it holds for craftsman. Deals primarily with the identification, care and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.

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| MEC 1102 Machine Shop Theory and Practice | 3 | 12 | 7 |
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Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will be introduced to the basic operations on the cylindrical grinder and will select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course.

Prerequisite: MEC 1101.

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| MEC 1103 Machine Shop Theory and Practice | 4 | 15 | 9 |
|--------------------------------------------------|---|----|---|

Advanced work on the engine lathe, turning, boring and threading machines, grinders, milling machine and shaper. Introduction to basic indexing and terminology with additional processes on calculating, cutting and measuring of spur, helical, and worm gears and wheels. The trainee will use precision tools and measuring instruments such as vernier height gages, protractors, comparators, etc. Basic exercises will be given on the turrent lathe and on the tool and cutter grinder.

Prerequisites: MEC 1102.

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| MEC 1104 Machine Shop Theory and Practice | 2 | 15 | 7 |
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Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutter grinder, cylindrical and surface grinder, advanced milling machine operations, etc. Special procedures and operations, processes and equipment, observing safety procedures faithfully and establishing of good work habits and attitudes acceptable to the industry.

Prerequisites: MEC 1103.

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| MEC 1112 Machine Shop Processes | 2 | 3 | 3 |
|----------------------------------------|---|---|---|

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the basic fundamentals of drill press and lathe operation; hand grinding of drill bits and lathe tools; set-up work applied to the trade.

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|---------------------------------------------|---|---|---|
| MEC 1115 Treatment of Ferrous Metals | 2 | 3 | 3 |
|---------------------------------------------|---|---|---|

Investigates the properties of ferrous metals and tests to determine their uses. Instructions will include some chemical metallurgy to provide a background for

the understanding of the physical changes and causes of these changes in metals. Physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatments for steel, surface treatments, alloy of special steel, classification of steels, and cast iron will be topics for study.

MEC 1116 Treatment of Non-Ferrous Metals 2 3 3

Continuation of the study of physical metallurgy. The non-ferrous metals: bearing metals, (brass, bronze, lead), light metals (aluminum and magnesium), and copper and its alloys are studied. Powder metallurgy, titanium, zirconium, indium and vanadium are included in this course.

Prerequisite: MEC 1115.

MEC 1120 Duct Construction and Maintenance 3 6 5

Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on the site repairs including duct made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation and ventilating hoods. Prerequisites: DFT 1116, AHR 1123.

MEC 1133 Mechanical Maintenance 4 9 7

To acquaint the student with the basic fundamentals of installation, maintenance and repair of machines. Miscellaneous electrical, mechanical, hydraulic, pneumatic, and lubrication devices are installed and maintained. Methods of rigging and machine installation, including location, leveling, and fastening are covered. The use of precision measuring tools and checking for accuracy, squareness, and correct center line distances are stressed for pre-start inspection.

Prerequisite: MEC 1101, DFT 1104, DFT 1113.

NUR 1101 Fundamentals of Practical Nursing 8

Designed to teach the practical nursing students the principles involved in good nursing care and an understanding of her profession through the study of the history of nursing, role of the practical nurse in the hospital, relationship to the patient's environment, and the responsibilities of patient hygiene, and adequate reporting and recording.

NUR 1102 Body Structure & Function 6

An introduction to disease producing organisms and a study of the structures and functions of the skeletal, muscular, and internal systems of the human body and their interrelationships in a well-integrated unit.

NUR 1105 Nutrition 3

A study of the basic principles of nutrition and meal planning, and the mechanics of nutrient utilization with consideration of religious, cultural, and psychological factors.

NUR 1107 Medical Surgical Nursing I 13

Course of study and practice which prepares the student to deal with chronically

and critically ill patients, including the aged, with a general medical or surgical problem and with their rehabilitation through diet, drugs, and nursing care. Also prepares the student for emergency situations in the institution, home, or community.

Prerequisite: NUR 1101, NUR 1102.

NUR 1108 Obstetric-Pediatric Nursing 14

The study and practice of nursing care of the pregnant woman, newborn infant, and pediatric patients, including the reproductive cycles, abnormal and normal progress of pregnancy, labor and delivery, care of the newborn, growth and development and abnormal conditions of the child and the effects of hospitalization.

Prerequisite: NUR 1110.

NUR 1110 Medical Surgical Nursing II 13

The study and practice of the care of specific medical and surgical problems and psychosomatic illnesses with increased emphasis on emotional needs, diet therapy, and observation and recording of the effects of drugs.

Prerequisite: NUR 1107.

NUR 1111 Drug Administration 2

A study of drugs, their dangers, safe and intelligent administering of drugs, and laws regarding their use and control.

Prerequisite: MAT 1105.

NUR 1114 Family Units 3

A study of family development; emphasizing it as a unit of interacting members, interacting with each other and the community, and of the effects of illness of a member of that unit and their care within the home.

NUR 1116 Vocational Adjustment 2

Study of ethics and procedures for obtaining, holding, and resigning employment, the legal aspects of nursing, and her responsibility to herself, her profession, her patient, and employer.

NUR 1120 Nursing Skills Seminar 2

A controlled discussion group course to review experiences and learning situations occurring in day-to-day clinical activities involving obstetrics, pediatric, or medical-surgical nursing. Individual problem solving of actual cases will be stressed.

PHY 1101 Applied Science 3 2 4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

PHY 1102 Applied Science 3 2 4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force,

motion, work, energy, and power.

Prerequisite: PHY 1101.

PLU 1110 Plumbing — Pipe Work 5 3 6

An introductory course designed to provide the student with fundamental procedures and practice in plumbing and pipe work. Emphasis will be placed on repair and maintenance of existing facilities and planning for new installations.

PME 1101 Internal Combustion Engines 5 15 10

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

PME 1102 Engine Electrical and Fuel Systems 3 12 7

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

PSY 1101 Human Relations 3 0 3

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

WLD 1101 Basic Welding 2 3 3

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

WLD 1103 Basic Gas Welding 0 3 1

Welding demonstrations by the instructor and practice by the students in the Air Conditioning Shop, utilizing oxyacetylene equipment only. Safe and correct methods of assembling and operating portable welding equipment. Practice will be given in surface and bronze welding, silver soldering and flamecutting applicable to air conditioning repair work.

WLD 1104 Basic Welding and Cutting 4 6 6

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver soldering, arc and gas-arc welding methods applicable to mechanical repair work.

WLD 1112 Mechanical Testing & Certification Practices 1 3 2

The standard methods for mechanical testing of welds. The student is introduced

to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, Charpy impact, etc. Also involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

WLD 1120 Oxacetylene Welding and Cutting 5 15 10

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units—Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

WLD 1121 Arc Welding 4 12 8

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

WLD 1122 Commercial and Industrial Practices 3 9 6

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive tests and inspection.

WLD 1123 Inert Gas Welding 1 3 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: Principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

WLD 1124 Pipe Welding 4 12 8

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

WLD 1125 Certification Practices 1 9 4

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and

the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124.

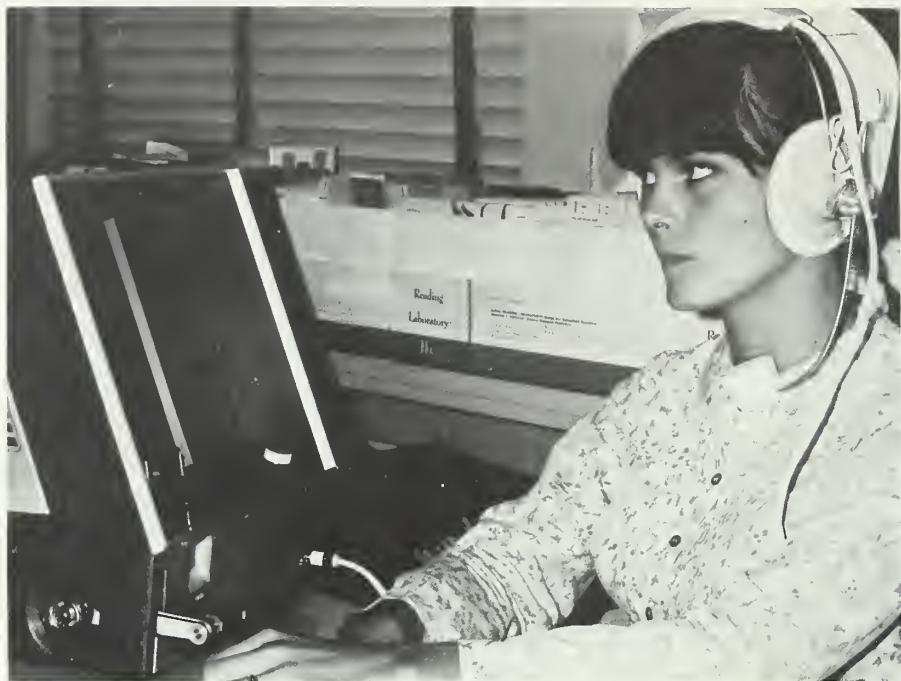
WLD 1126 Advanced Arc Welding

2 15 7

A continuation of good arc welding practices as covered in WLD 1121. Emphasis will be placed on accuracy and speed in all welding positions. All welds will be tested for strength. Safety procedures are emphasized throughout the course in the use of tools and equipment.



CERTIFICATE PROGRAMS



DEVELOPMENTAL STUDIES

INTRODUCTION

The need often exists to provide specialized or directed studies for students having academic deficiencies which prevent them from entering regular curriculum programs. These weaknesses usually exist in the areas of mathematics, English, or science.

PURPOSE

The Developmental Studies curriculum is designed to provide developmental instruction in mathematics, English, and science appropriate to the level at which the student enters the program. Additionally, the curriculum provides an opportunity for the student to audit other curriculum programs in which he may be interested in order that he can determine interest in and aptitudes for those programs.

Further, the curriculum provides instruction in study habits, reading, social science, and vocational selection.

In cases where the student cannot attain a level of academic proficiency to enter regular curriculum programs, he will be counseled and every effort will be made to assist him in finding employment.

DEVELOPMENTAL STUDIES

| | | | Hours Per Week | | Quarter |
|-----------------------|-----|----------------------------------------------------------|----------------|-----|-----------------|
| | | | Class | Lab | Hours Credit |
| FALL QUARTER | | | | | |
| ENG | 001 | Communicative Skills (Oral) ✓ | 1 | 4 | 3 |
| MAT | 001 | General Mathematics ✓ | 3 | 2 | 4 |
| MET | 001 | Methods of Study (SQ3R) ✓ | 3 | 2 | 4 |
| | | Elective Audit <i>Reading</i> | 7 | 8 | 11 |
| WINTER QUARTER | | | | | |
| ENG | 002 | Reading Improvement | 3 | 2 | 4 |
| MAT | 002 | General Business Mathematics | 3 | 0 | 3 |
| VOC | 001 | Vocational Selection | 2 | 0 | 2 |
| ENG | 003 | Language Arts (Grammar) | 3 | 2 | 4 |
| | | Elective Audit | 11 | 4 | 13 |
| SPRING QUARTER | | | | | |
| PSY | 001 | Psychology and Problem Solving <i>Human & Verbal</i> | 3 | 2 | 4 |
| SCC | 001 | Comparative Government | 5 | 0 | 5 |
| ENG | 004 | Composition | 3 | 2 | 4 |
| SCI | 001 | General Science <i>Reading</i> | 3 | 2 | 4 |
| | | Elective Audit | 14 | 6 | 17 |

COURSE DESCRIPTIONS

DEVELOPMENTAL STUDIES

The following section provides a brief description for each course listed in the previous section. Courses are listed alphabetically by prefix and arranged in ascending order by number.

The numbers given on the right side of the page (3 2 4) indicate the following: First number gives the hours per week of lecture, second number gives

the hours per week of laboratory or shop, and the third number indicates the quarter hour credit for that one course.

Elective Audit 0 10 0

Designed to develop independence in decision making of career choice through observation and participation in vocational and technical areas of interest.

Elective Audit 0 10 0

Designed to develop independence in decision making of career choice through observation and participation in vocational and technical areas of interest.

Elective Audit 0 5 0

Designed to develop independence in decision making of career choice through observation and participation in vocational and technical areas of interest.

ENG 001 Communicative Skills (Oral) 1 4 3

Designed to familiarize students with the current practices in the preparation and delivery of speeches. Considering briefly techniques of group discussion to develop and broaden the vocabulary of the student, deepen the understanding of the English language, and provide a basis for transfer of this knowledge into increased reading speed, comprehension, and writing ability. Includes dictionary skills, word attack, phonics, occupationally oriented terminology, spelling, and intensive vocabulary drill. Emphasis on rhetoric.

ENG 002 Reading Improvement 3 2 4

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition. Emphasis placed on comprehension, vocabulary expansion, and the ability to locate information. Continue to demonstrate the value of oral communication.

ENG 003 Language Arts (Grammar) 3 2 4

Designed to expand skills in reading, writing, listening, and speaking. Emphasis on grammar, diction, sentence structure, punctuation, and spelling.

ENG 004 Composition 3 2 4

A study of the essentials of composition and rhetoric; consequently the written work is emphasized. Self-expression in grammar through paragraph formation applied to situations in industry, business, and vocational skills.

MAT 001 General Mathematics 3 2 4

Designed primarily for the non-specializing student. Devoted primarily to improving comprehension, speed, and accuracy in dealing with the basic operation of the number system. Will include a review of the kinds of numbers, multiplication, addition, subtraction, and division. Trade oriented problem solving will be stressed.

MAT 002 General Business Mathematics 3 0 3

Techniques and practice in the solution of common mathematical problems

encountered in the ordinary operations of the business enterprise and various other organizations.

MET 001 Methods of Study (SQ3R)

3 2 4

Designed to develop an understanding for the need for study and good study habits. Presents an uncomplicated but effective method of study equally applicable to vocational and technical programs. Emphasis to be placed on outlines, note-taking, library uses, and research oriented to individual interest areas.

PSY 001 Psychology and Problem Solving

3 2 4

A study of human problems involved in communications, individual needs and behavior, motivation, cooperation and productivity. Through case analysis and reading, the student develops an appreciation of what constitutes a proper evaluation of human behavior.

SCC 001 Comparative Government

5 0 5

A survey of the elements and relationships of local, state, and national governments, with particular emphasis of government on the local level showing comparisons of types of local governments (county-city), and problems that are unique to each.

SCI 001 General Science

3 2 4

An introductory course designed to give the student a better foundation for Applied Science appropriate to both technical and vocational curricula. It will include time, celestial body, space, with emphasis upon practical and historical geology.

VOC 001 Vocational Selection

$$\begin{array}{ccccc} 2 & & 0 & & 2 \\ & \nearrow & & \nwarrow & \\ & 1 & & 1 & \\ & \nearrow & & \nwarrow & \\ & 2 & & 2 & \end{array}$$

Designed to assist the student in the identification and selection of a vocational or technical field in which the student should be able to succeed. Emphasis on training, application, testing, interviewing, and job selection. Discussion of types of jobs, personal traits, attitudes, desires, and information sources in securing jobs.

INDUSTRIAL SEWING

INTRODUCTION

Rapid growth of the textile and related industries in the Southeast has created an even greater demand for skilled operators of industrial sewing machines. With this growth and the rising costs of production, management desires that employees reach maximum effectiveness as soon as possible after going on the job.

PURPOSE

The purpose of this curriculum is to provide a five-week skill training course in the operation of industrial sewing machines to enable the student to meet the entry level requirements of the textile industries. This training will be enhanced by cooperative work experience in the industrial environment and human relations training in the classroom.

INDUSTRIAL SEWING

| | | | <i>Hours Per Week</i> | <i>Quarter</i> |
|-------------------|-------|----------------------------------------------------------|-----------------------|----------------|
| | | | <i>Class</i> | <i>Hours</i> |
| | | | <i>Lab</i> | <i>Credit</i> |
| FIVE WEEKS | | | | |
| TEX | 1101 | Operation, Care and Cleaning of Power Sewing Machines | 0 | 10 |
| | | | | 1 |
| TEX | 1102 | Basic Sewing | 25 | 90 |
| | | | | 6 |
| PSY | 1101A | Human Relations | 25 | 0 |
| | | | | 2 |
| *ENG | 1101A | Reading Improvement | <u>25</u> | <u>0</u> |
| | | | <u>75</u> | <u>2</u> |
| | | | 100 | 11 |

*OPTIONAL—Reading tests will be administered to determine reading level. Students scoring above minimum reading level may choose to continue hours on Basic Sewing.

COURSE DESCRIPTIONS INDUSTRIAL SEWING

***ENG 1101A Reading Improvement** 25 0 2

Entrance into this course will be determined by reading evaluation test. Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and to train for comprehension in larger units.

PSY 1101A Human Relations 25 0 2

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

**TEX 1101 Operation, Care and Cleaning of
Power Sewing Machines** 0 10 1

An introductory course designed to teach the student the nomenclature, operating principles, care, and cleaning of the equipment on which he is to be trained. Emphasis will be placed on safety during operations.

TEX 1102 Basic Sewing 25 90 6

This course is designed to introduce the student to the basic sewing operations and provide timed skill practice. Emphasis will be placed on special operations used by local industry. Safety will be stressed.

*OPTIONAL: Reading tests will be administered to determine reading level. Students scoring above minimum reading level may choose to continue hours on Basic Sewing.

CONTINUING EDUCATION PROGRAMS



GENERAL INFORMATION

Academic Credit

Generally, courses offered in the Adult-Extension Program are non-credit. However, credit will be given in the Adult High School Diploma Program. Certificates may be awarded students who successfully complete certain vocational-extension programs.

Attendance

Students are encouraged to attend all classes. In order for a student to be presented an Attendance Award, he must attend at least eighty (80) percent of the classes as well as successfully complete the prescribed course.

Cancellation

Robeson Technical Institute reserves the right to cancel any course which has insufficient enrollment.

Admission

The open door policy is observed regarding requirements for admission to continuing education classes. Any person who is a high school graduate or at least eighteen years of age and not currently attending a public school is eligible to enroll.

Insurance

An accident insurance policy is available to all students registered in the Continuing Education program. The policy offers protection for the student en route to class, during class, and en route home.

New Classes

Any class may be started if twelve (12) or more persons are interested and a qualified instructor can be employed.

Registration

Registration for all adult-extension courses will be completed during the first class session, in the classroom assigned for the course. Registration for evening (credit) curriculum courses will be held in September and January in the Student Services Office.

Advance registration is urged, especially in classes where there is considerable demand. One can register in the following ways:

1. Register at the locations on the dates given in the schedule of Classes.
2. Register at any time in the Continuing Education office at R.T.I. Phone: 738 7101, Lumberton.
3. Register during the first night of the class.

TUITION AND FEES

A \$2.00 registration fee is charged for all continuing education courses, except adult Basic Education. A \$16.00 registration fee is charged for Driver Education.

ADDITIONAL INFORMATION

Additional information about adult-extension classes may be obtained from the office of the Continuing Education at RTI by calling 738-7101.

COMMUNITY SERVICES

Robeson Technical Institute sponsors and promotes a number of community services. These services contribute to the cultural, economic, and civic development of the community. The institute may also be host to a number of local, state, and national groups that will conduct seminars and conferences on campus. Lodging, restaurants, and other facilities are located nearby for the out-of-town conferee. Representative community service offerings at the institute include seminars and conferences, creative arts festival and exhibitions, musical programs, and a speakers' bureau.

GENERAL ADULT EDUCATION

ADULT BASIC EDUCATION

Adult Basic Education is a program designed to help adults improve their basic skills in reading, writing, speaking, arithmetic, science, and social studies. Classes meet two nights per week for two and one-half to three hours per week.

Classes are organized whenever and wherever there is a justifiable demand for them. Classes in the past have been conducted at Robeson Technical Institute, Fairgrove High School, Lumberton Jr. High School, Pembroke Jr. High, Proctorville Elementary School, Southside School, Saint Pauls Elementary School, Purvis Elementary School, Union Elementary School, R. B. Dean School, Rex-Rennert School, Robeson County Prison Unit, Red Springs Jr. High, Rosenwald School, Marietta School, Oxendine Elementary School, Deep Branch Elementary School, Allenton Elementary School, and Parkton School.

Classes are organized in the following levels:

Level One: Non-readers through grade three; basic reading, writing, arithmetic.

Level Two: Grade four through grade six; reading improvement, English expression, arithmetic, geography, and social studies.

Level Three: Grade seven through grade eight; reading improvement, English expression, social studies, mathematics, science.

No registration fee is required and textbooks are provided by the Institute. All instructional materials used have been prepared with emphasis on individual needs and interests.

No degree certificate is awarded. However, for the successful completion of a year of study in the Adult Basic Education Program, the student is awarded an Achievement Certificate.

Adult High School Program

The Adult High School Program provides a student the opportunity to earn the Adult High School Diploma. Before receiving the Adult High School Diploma, an adult must demonstrate proficiency in reading, English expression, mathematics, science, and social studies, as measured by a battery of

standardized tests administered by Robeson Technical Institute.

Transcripts of high school records are required of those students enrolled in the Adult High School classes who have previously attended high school. Copies of these transcripts should be forwarded to the Director of Basic Education, Robeson Technical Institute.

No registration fee is required, and books are provided by the Institute. A fee is charged upon graduation for the diploma and for transcript service. Classes meet two nights a week for three hours in the local communities where there is a sufficient number of interested adults.

An Adult High School Diploma is awarded a student when test scores indicate that the required achievement level has been attained. The diploma is awarded locally, by the appropriate Board of Education. The Adult Diploma program is approved by the State Board of Education and meets the requirements for entrance to four-year colleges and other institutions of higher learning.

High School Equivalency (GED)

Another program for the adult who has not completed high school is the High School Equivalency program. Under the plan, individuals may take a series of tests called the General Educational Development tests (GED). Those receiving an acceptable passing score of 225 points with no single test score below 35 and a combined average of 45 will be awarded a High School Equivalency Certificate. This certificate is generally accepted on a basis equal to a high school diploma for employment, promotion, or further education.

The GED tests cover five broad areas: English Expression, Literature, Mathematics, Social Studies, and Natural Science and are administered at the Institute.

The following requirements must be made before taking the GED test: (1) Minimum age: 18 and out of school for six (6) months. (2) Is a resident of the State. (A resident is defined as a person currently residing in the state, including assignment to a military base in the State.) (3) File application on a special form, which is available in the office of Superintendent of Schools or at Robeson Technical Institute. (4) Application must be endorsed and approved by the Superintendent of Schools or by the appointed RTI staff member. (5) Cost: a fee of \$3.00 for the testing, (6) Have a valid vocational, educational, or other purpose in applying.

The Institute, through the Learning Laboratory or Adult High School classes, offers the individual the opportunity to prepare for the GED test.

Requests for application forms, test dates, and other information should be directed to the Director of Basic Education at Robeson Technical Institute.

Learning Laboratory

The Learning Laboratory is an approach to education with the use of commercially and locally designed programmed instructional materials, self-instructional units, and teaching machines. It is essentially an individual study situation, whereby a person's progress is limited primarily by his own ambition, motivation, and ability.

Any person eighteen years of age or older and out of the public schools for at least six months can enroll in the Learning Lab for any of several purposes: (1) to prepare for the high school equivalence examinations (GED);

(2) to pursue the Adult High School Diploma; (3) to reduce specific educational weaknesses; (4) to upgrade for job promotion; (5) for personal satisfaction; or (6) to make up admissions deficiencies for a technical institute or college. The Lab can also be used by regular R.T.I. curriculum students to supplement their regular course work when they feel help beyond the classroom is needed.

The coordinator serves as the facilitator in the learning process. Because he is trained in programmed and self-instructional techniques, he is capable of making educational decisions and directing students through their assignments. The coordinator interviews, counsels and tests the prospective enrollee. Merits and weaknesses are noted in the student's area of interest, after which an individual curriculum is designed especially for that student. The student begins study at his pre-determined educational level and advances through the materials at his own rate of speed.

The Learning Lab is approved by the Veterans Administration. Studies toward high school completion does not count against training eligibility beyond high school.

The Learning Lab is open from 8:00 a.m. until 10:00 p.m. Monday through Thursday, and 8:00 a.m. until 5:00 p.m. Friday. There are no charges for the services of the Learning Laboratory.

Rings can be ordered through the Student Services office for those who complete the Adult High School Diploma program. These students participate in the high school graduation ceremonies held in August of each year.

LEARNING LABORATORY AREAS OF PROGRAMMED STUDY

READING AND LANGUAGE

Reading instruction at all levels
Vocabulary development
Grammar
Composition
Punctuation
Capitalization
Business letter writing
Spelling
Sentence patterns
American Literature
English Literature
Composition

SOCIAL STUDIES

United State Geography
United State History
World History
American Government
How a Bill Becomes a Law
Economics
The Constitution

SCIENCE

General Science
Geology
Biology
Chemistry
Physics
Vectors
Mechanics
Engines

MATHEMATICS

Basic Arithmetic
General Mathematics
Modern Mathematics
Algebra I
Algebra II
Plane Geometry
Solid Geometry
Trigonometry
Calculus
Consumer Mathematics

PSYCHOLOGY

Logic
General Psychology
Analysis of Behavior
Statistics for Introductory
Psychology
Basic Sociological Concepts
Physiological Psychology

BUSINESS

Understanding Stocks
Economics
Stenoscrrpts: ABC Shorthand
Basic Income Tax
Insurance
Investments
Business Mathematics
Beginning Bookkeeping
The Accounting Process

TECHNICAL

Jobs
Circuits Symbols
Mixing Mortar
Basic Electricity
Basic Electronics
Auto Mechanics

FOREIGN LANGUAGE

French
Spanish
German

MISCELLANEOUS

The Elements of Bridge
The Game of Chess
Interior Decoration
Musical Notation
Drug Use and Abuse
Religious Education

ADULT ENRICHMENT EDUCATION

General adult extension courses are designed to provide educational opportunities for adults for cultural enrichment, self-fulfillment, personal satisfaction, and other general interests.

Any adult eighteen (18) years of age or older who can profit from instruction may enroll. Persons may enroll in either day or evening classes and may enroll in classes on campus, at one of the adult mini centers, or at other specified areas in the county.

ART, ADVANCED ART 2180

30 Hrs.

A course for the more advanced students of painting. Art, Intermediate is a prerequisite or the equivalent level of knowledge is required. The student will work with different media. Individual assistance will be given on problems of composition—realistic, abstract, and nonobjective—to encourage individual expression.

ART, BEGINNING ART 2181

30 Hrs.

A course for beginning art students, including the fundamentals of drawing and painting and the different media used. Color theory and composition will be emphasized. Selection, care, and use of supplies and equipment will be taught.

ART, INTERMEDIATE ART 2183

30 Hrs.

A continuation of Art, Beginning. It is designed for those students not yet ready for Art, Advanced. Emphasis is placed on color and composition. Painting with a palette knife and abstract painting is taught.

ART, PORTRAITS ART 2182 30 Hrs.

A course for the advanced student of art who has completed Art, Advanced or its equivalent. Emphasis will be on skin tones, anatomical shape and structure, and the use of different media for both photographs and live models.

BIBLE GAE 2270 30 Hrs.

A course designed to be both broad and specific in nature. Student preference and request determines the nature of the course. This course can be a broad look at the Old Testament or the New Testament. It may follow the Sunday School lessons or it may concentrate on one book, one prophet, or one era. The student may contact R.T.I prior to registration to obtain information on the specific nature of each course.

CAKE DECORATION, ADVANCED GAE 2180 30 Hrs.

A course for the more advanced students of cake decoration. Cake Decoration, Beginning is a prerequisite. Knowledge and use of decorating equipment is presumed. Instruction will center around the more difficult forms of cake decoration. Decoration of cakes for all occasions will be taught.

CAKE DECORATION, BEGINNING GAE 2189 30 Hrs.

A course emphasizing decorating equipment and its use. Students will learn pressure control of decorating utensils, the art of forming decorative flowers and forms, and the art of writing on cakes. Instruction will be provided for decorating cakes for all occasions.

CERAMICS ART 2184 30 Hrs.

A course introducing the student to the art of ceramics. Pouring of molds, the use of glazes, painting, and kiln operation and firing will be taught. Major equipment is furnished. Students furnish their own supplies and may retain the articles which they make.

CHOIR, DIRECTING MUS 2180 30 Hrs.

A course designed to develop technique and knowledge in the directing of choir and public conducting of group singing. It is especially helpful to directors of music programs in churches.

CRAFTS, CREATIVE ART 2186 30 Hrs.

A hobby type class for the student who wants to learn various crafts. It introduces various crafts including block printing, jewelry making, decoupage, copper enameling, basket weaving, and plastic molding.

CREWEL, EMBROIDERY GAE 2182 30 Hrs.

A course in the art and skill of crewel embroidery. Emphasis will be on basic embroidery stitches on pincushions, pillows, on roll hangings, and individual designs on kits. The student will learn to make items such as wall pictures, handbags, pillow covers, and slip covers.

DECOUPAGE ART 2185 30 Hrs.

Instruction trains adults in the artistic decoration of such articles as plaques,

bottles, and jewelry boxes. This antique craft is a centuries-old technique of coloring prints, cutting out all the delicate patterns, pasting them onto a piece of furniture that is suitable, and varnishing the finished piece.

DRIVER EDUCATION GAE 2431

54 Hrs.

A course designed to teach adults how to drive an automobile. The course consists of thirty-six hours of classroom instruction, six hours of behind-the-wheel training per student, and twelve hours of traffic observation. The fee for this course is \$16.00.

FIRST AID GAE 2430

30 Hrs.

A course designed to give the basics of first aid treatment techniques to persons who will be confronted with injuries from accidents likely to occur both in the home and at work. Factual information is covered for the temporary treatment of sudden illnesses, attacks, and seizures on the job. The scope of the course is determined by the students.

FLORAL DESIGN GAE 2184

30 Hrs.

Students study and practice the art forms and principles of flower arranging. Areas covered include uses of flowers, containers and accessories, design principles, color and texture, and arrangement for special occasions. Methods of flower and greenery preservation will be taught.

INCOME TAX, FEDERAL BUS 2091

30 Hrs.

A study and application of the federal personal income tax system. Tax laws, procedures, and practical applications are included.

INCOME TAX, STATE BUS 2092

15 Hrs.

A study and application of the state personal income tax system. Instruction will include the use of proper forms, exemptions, allowable deductions, and other subjects of interests to the taxpayer.

INTERIOR DESIGN GAE 2181

30 Hrs.

A course designed to achieve beauty and comfort in the home. Emphasis will be placed on furniture styles, use of color and design in fabrics, floor coverings, and accessories. It includes a study of room arrangement and current trends. Practical application of the basic design elements will be related to student needs and interests.

INVESTMENTS, PERSONAL BUS 2090

20 Hrs.

A course to give the student a basic understanding of the various facets of the world of finance. Included in this course are such topics as investment funds and figures, risks of investment, dividends, common and preferred stock, meaning of investment, short selling, significance of general financial news, buying on margin, exchanges, mutual funds, and investment management. It is designed to enhance the student's understanding of stocks, bonds, and the market.

KNITTING, ADVANCED GAE 2185

30 Hrs.

A course for the more advanced students of knitting. Knitting, Beginning is a pre-

requisite. More difficult and complex knitting will be taught in this class. Individual instruction will be provided students while they work on garments of their choice.

KNITTING, BEGINNING GAE 2183 30 Hrs.

A course designed to teach the fundamentals of knitting. Students will learn abbreviations, pattern terms, and how to follow directions. Instruction will include basic knitting stitches, the study of yarns, and the construction of simple garments. Students are required to furnish needles and thread.

LANDSCAPING HEC 2366 30 Hrs.

A course designed to give the student a basic understanding of general landscape work. Included in the course will be instruction relating to the proper care of shrubs, plants, trees, and lawns, as well as placement and arrangement.

MECHANICS, POWDER PUFF HEC 2367 30 Hrs.

A course designed to teach women the fundamentals of how an automobile operates, how to make tire changes, and how to make simple emergency repairs. Periodic preventive maintenance and general upkeep will be emphasized.

NEEDLEPOINT GAE 2186 30 Hrs.

Instruction in the fundamentals of needlepoint. Instruction will include types of stitches, use of kits, and original designs on needlepoint canvas. Students will learn abbreviations, symbols, and terms, and how to follow directions. Students will work on simple projects of their choice.

PARTY FOODS GAE 2187 30 Hrs.

A course designed for adults placing stress on foods to be served at special parties, such as teas, receptions, and coffee hours. It will include suggestions for beverages of different types, and all sorts of "finger food" as well as some ideas for refreshments of a more substantial nature.

PUBLIC SPEAKING GAE 2421 30 Hrs.

A course designed to help adults develop the poise and confidence necessary for speaking effectively to an audience. Fundamental techniques of effective public speaking, including making simple announcements to delivering a formal address, will be taught. Emphasis will be placed on the gathering and organizing of speech material and on the methods of presentation. Students will be given the opportunity to develop short talks and to present them before the class.

READING IMPROVEMENT GAE 2420 20 Hrs.

A course designed to improve reading comprehension by training to read more rapidly and accurately. It is composed of a series of sessions in which the tachistoscope method of flashing forms on a screen is used — digits, words, phrases, and sentences. Objectives of the course include broadening the span of perception and recognition and increasing speed and comprehension in reading. Principles of vocabulary building will be stressed.

REAL ESTATE, APPRAISAL BUS 2093 30 Hrs.

Instruction organized to meet the needs of the persons attending. This course

will include appraisal techniques, capitalization of income and depreciation, market comparisons, cost approach, factors influencing value, ethics, and other relevant topics.

RELIGIONS OF THE WORLD GAE 2271

30 Hrs.

A course designed to introduce the student to various religions of the world. Included in this course is the history and background of Hinduism, Judaism, Shintoism, Taoism, Buddhism, Confucianism, Christianity, Sikhism, and Mohammedanism.

SEWING, ADVANCED HEC 2362

30 Hrs.

A course based upon general knowledge and skills covered in Sewing, Intermediate, which is a prerequisite for this course. Instruction will include construction of garments using complicated techniques.

SEWING, BEGINNING HEC 2360

30 Hrs.

A course for beginning sewing students and anyone who would like to brush up on basic sewing techniques or learn about the new and simplified methods of sewing. Instruction will include selection and fitting of patterns, identification and use of necessary sewing equipment, knowledge of fabrics, alterations, pressing, and the construction of simple garments.

SEWING, DRAPERY AND CURTAIN CONSTRUCTION HEC 2368 30 Hrs.

A course centering around the construction of curtains and draperies. Instruction will begin with selection of materials and proceed through the finished product.

SEWING, INTERMEDIATE HEC 2361

30 Hrs.

A continuation of Sewing, Beginning. It is designed toward the reinforcement of previously developed learnings and the acquisition of sewing skills necessary in the construction of garments. Areas covered will include principles of design, zipper insertion, alterations and placement of pattern, linings and interfacings, and bound buttonholes.

SEWING, KNITS HEC 2365

30 Hrs.

A course designed as a lecture/demonstration class with an opportunity provided the students to apply and practice what they learn. It will emphasize the quick sewing of knits and the proper stitching of fabric. Instruction in this course will include laying of material and placement of pattern, explanation of pattern coding and directions, use of graph paper and tracing, cutting of material, and the construction of quick-made knit garments. A student of this course should have some basic knowledge of home sewing.

SEWING, TAILORING HEC 2369

30 Hrs.

A course designed for the student who has considerable skill in sewing. Sewing, Advanced is a prerequisite. This is an advanced class in suit or coat construction. Instruction will consist of selection of pattern and fabric, tailoring techniques, and fitting and pressing involved in making a lined suit or coat.

SLIMNASTICS HEA 2330

20 Hrs.

A course designed for men or women to assist in controlling weight and keeping in fine physical condition. Students will participate in various calisthenics and gymnastic exercises. Dress should be comfortable.

OCCUPATIONAL EXTENSION EDUCATION

Occupational education extension courses are designed to serve adults who are employed or are seeking employment at the skilled, technical, and sub-professional levels. Persons in professional occupations may also profit from such instruction by learning of new developments in their field.

Any adult eighteen (18) years of age or older who can profit from instruction may enroll. Persons who are employed normally attend training during their nonworking hours to increase their skills and understanding, to improve their competency and qualify for advancement.

AGRICULTURE

Robeson Technical Institute offers courses in Agricultural and Biological Extension to prepare students, including employed adults who need training or retraining for employment in agriculture or agricultural-related occupations. Most of the courses are vocational in nature and mainly designed for farmers, part-time farmers, and rural homeowners interested in acquiring skills in such courses as:

Agricultural Mechanics
Basic Bricklaying
Basic Welding
Boat Construction
Electric Motor Repair
Farm Mechanics

Farmstead Wiring
Landscaping
Ornamental Horticulture
Residential Wiring
Tractor Maintenance

AMBULANCE ATTENDANT

Due to recent developments in the legislature and law pertaining to ambulance drivers, Robeson Technical Institute offers the ambulance attendant course for the training of ambulance drivers and attendants. The complete course embraces 24 hours of instruction, 8 hours of which is taught by a medical doctor.

| Areas of Study | Hours |
|------------------------------------------------------------------------------|-------|
| The Ambulance Attendant as a Member of the Medical Team | 2 |
| Care of Patients with Respiratory Interference | 4 |
| Management of Patients with Hemorrhage Shock and Common Types of Injuries | 4 |
| Care of Patients with Head and/or Back Injuries | 3 |
| Fractures and Dislocations | 3 |
| Management of Patients with Common Medical Conditions | 3 |
| Management of the Obstetrical Patient | 2 |
| The Emotionally Disturbed Patient | 2 |

FIRE SERVICE TRAINING

Robeson Technical Institute offers fire service training to both volunteer and career firemen. This training, taken directly to the local fire departments, allows the men to be trained as an organized group utilizing equipment ordinarily used in controlling fire.

Instruction offered by the Fire Service Training program covers nearly every phase of firemanship. Courses are designed not only to develop necessary skills, but also to develop the fireman's initiative and judgement, safe habits, and correct techniques for using tools and equipment, and to give a variety of fire situation experiences. Materials and texts used are those approved by the International Fire Service Training Association.

Fire Service Training includes the units of firefighting listed below. The order in which the units are studied is left to the discretion of each fire department.

| | Minimum Hours |
|--------------------------------|---------------|
| Introduction to Firefighting | 42 |
| Forcible Entry | 9 |
| Rope Practices | 6 |
| Portable Fire Extinguishers | 9 |
| Ladder Practices | 9 |
| Hose Practices | 12 |
| Salvage and Overhaul Practices | 9 |
| Fire Stream Practices | 12 |
| Fire Apparatus Practices | 12 |
| Ventilation | 9 |
| Rescue Practices | 12 |
| Protective Breathing Equipment | 9 |
| Firefighting Procedures | <u>12</u> |
| TOTAL | 120 |

In addition to the standard units of training, the following specialized courses are offered:

| | |
|------------------------------------|----------------------------|
| Teacher Education | Compressed Gas Emergencies |
| Arson Detection | Hospital Fire Safety |
| Fire Brigade Training for Industry | Officer Training |
| First Aid for Firemen | School Bus Evacuation and |
| Home Fire Safety | Fire Safety |
| Civil Disorder | Underwater Rescue |
| | Area Fire School |

As the need arises, more and more specialized courses are being added to the program.

HEALTH OCCUPATIONS

Robeson Technical Institute offers Health Education courses that are designed to provide instruction for anyone interested in the improvement of health services to upgrade themselves in their professions. Courses are available in the following subject areas:

Body Structure and Functions
 First Aid for Rescue Squads
 Home Nursing
 Health Care

Nurses Aide
 Operating Room Techniques
 Emergency Room Techniques

LAW ENFORCEMENT TRAINING

Robeson Technical Institute offers many courses in Law Enforcement Training. The goal is to promote and provide adequate training and education courses in legal and technological fields that will keep law enforcement officers abreast of advancements in law enforcement techniques.

Introduction to Police Science embraces a total of 15 divisions with a minimum of 120 hours of instruction.

| Major Divisions | Hours |
|----------------------------------------------------|------------|
| History and Constitutional Law | 8 |
| Introduction to Criminal Law | 24 |
| First Aid | 10 |
| Laws of Arrest | 11 |
| Laws of Search and Seizure | 6 |
| Laws and Rules of Evidence | 3 |
| General Criminal Investigation | 14 |
| Motor Vehicle Accident Reporting | 8 |
| Motor Vehicle Laws | 16 |
| Liquor Laws | 3 |
| Recognition and Identification of Drugs-Drug Abuse | 5 |
| Fundamentals of Supervision | 3 |
| Laws Related to Riot and Civil Disorder | 3 |
| Court Structure and Procedures | 4 |
| Report Writing | 3 |
| Juveniles | 6 |
| Defensive Tactics | 6 |
| Patrol Operations | 12 |
| Public Relations | 6 |
| TOTAL | 151 |

In addition to these courses, Robeson Technical Institute offers the following special law enforcement courses designed for those now engaged in law enforcement activities:

| Course | Hours |
|-----------------------------------|-------|
| Criminal Investigation | |
| Narcotics Seminar | 8 |
| Rules of Civil Procedure | 16 |
| Breathalyzer School | 28 |
| Firearms School | 20 |
| Bomb Threat and Disposal Training | 16 |
| Jail Administration School | 16 |
| Radar School | 8 |

MANAGEMENT DEVELOPMENT PROGRAM

Robeson Technical Institute offers a complete course in supervisory training. These courses are planned to serve the needs of potential supervisors, foremen, and supervisory personnel, such as department heads, junior executives, and executives.

| Course | Hours |
|--------------------------------------------------|-------|
| Principles of Supervision | 48 |
| Job Relations Training | 10 |
| Science of Human Relations | 18-20 |
| Art of Motivating People | 22 |
| Economics in Business and Industry | 22 |
| Effective Communications | 22 |
| Effective Writing | 22 |
| Effective Speaking | 15 |
| Speed Reading | 20 |
| Work Measurement | 22 |
| Job Methods | 10 |
| Conference Leadership Training | 10 |
| Instructor Training | 15 |
| Creative Thinking | 22 |
| Industrial Safety and Accident Prevention | 22 |
| Industrial First Aid | 10 |
| Employee Evaluation and Interviewing | 12 |
| Job Analysis Training | 12 |
| Management Primer | 44 |
| Job Instruction Training | 12 |
| Supervision in Hospitals | 40 |
| Motion and Time Study (For Supervisors) | 10 |
| Transportation and Traffic Management | 69 |
| Principles of Business and Industrial Management | 38-56 |
| Labor Laws for Supervisors | 12 |
| Pre-Supervisory Training | 28 |

In addition to the courses listed above, the Department of Community Colleges is presently developing a 50-hour course designed for supervisory and mid-management positions. This course will consist of 10 parts to include:

| | |
|-------------------------------|-------------------------------|
| Control in Supervision | Personnel Administration |
| Distribution and Sales | Procurement and Inventory |
| Enterprise Organization | Production Management |
| Human Relations in Management | Records and Reports |
| Management Productivity | Research and Public Relations |

OCCUPATIONAL EXTENSION COURSES

APPLIANCE REPAIR, MAJOR ELC 3767 60 Hrs.

Application of principles of electricity to repair large appliances such as washing machines, dryers, dishwashers, disposals, stoves, and hot water heaters.

APPLIANCE REPAIR, SMALL ELC 3768 60 Hrs.

Training in small appliance service and repair, including basic electricity as it applies to small appliance controls and operation, with shop work on toasters, fans, vacuum cleaners, electric irons, mixers, blenders, etc.

ART OF MOTIVATING PEOPLE MDP 3001 22 Hrs.

A course designed to show the importance of motivation of people in achieving more effective production. A further value derived from this course is to provide self-evaluation for those attempting to stimulate others.

AUTO AIR CONDITIONING AUT 3700 30 Hrs.

Introduction to the principles of refrigeration; study of the assembly of components and connections necessary in the mechanisms, the methods of operation, and control, proper handling of refrigerant in the charging of the system.

AUTO BODY AND FENDER REPAIR AUT 3712 60 Hrs.

A course to give the student some experience in minor repairs of dents, and straightening or replacing fenders on cars and trucks. Emphasis will be placed on sanding, taping, painting and finishing of parts repaired.

AUTO ENGINE TUNE-UP AUT 3710 60 Hrs.

A study of engine performance with emphasis on diagnostic methods of testing plugs, points, condensers, electrical systems, and carburetors. Modern testing equipment will be used to diagnose trouble with practical problems in troubleshooting.

AUTOMATIC TRANSMISSIONS Aut 3714 42 Hrs.

A study of operation, service, and repair of automatic transmission systems. Emphasis will be placed on the theory behind the operation of automatic transmissions. The student will learn to test transmissions on the chassis dynamometer. Practical shop application will be given to the study of torque converters, hydraulic control systems, and complex planetary gearing. All popular makes of transmissions will be studied.

BLUEPRINT READING DFT 3745 60 Hrs.

A course presenting principles of interpreting blueprints and specifications common to the building trade. Practice in reading details for grades, foundation, floor plans, wall, doors, windows, and roofs will be included.

BOAT CONSTRUCTION CAR 3880 60 Hrs.

A course designed to teach the student how to construct and build a one-man or two-man plywood fishing boat. Topics covered in practical application will include laying out, cutting, fitting, flueing, and nailing the necessary parts together. Finishing the boat with sanding, varnishing and painting methods will also be covered.

BODY STRUCTURE AND FUNCTION HEA 3390 60 Hrs.

A study of the structure and functions of the skeletal, muscular, and internal systems and their interrelationships in a well-integrated unit. An introduction

to disease-producing organisms is discussed with their effects upon the body as a whole.

BRICKLAYING, BASIC MAS 3750

60 Hrs.

Bricklaying involving the practices and methods of the masonry trade. Analysis, demonstration, and discussion are used to improve fundamental techniques in mixing and stringing mortar; laying bricks and blocks; masonry cutting materials; masonry, and metal bonding; corner and wall construction.

CABINET MAKING, INTRODUCTION CAB 3880

60 Hrs.

A course introducing skills for cabinet making. Hand and power woodworking tools will be introduced and utilized by the students. Lectures, demonstrations, and student practical applications concerning cabinet making will take place. This course is designed for the home owner and females as well as males are welcome to enroll.

CARPENTRY, BASIC CAR 3740

60 Hrs.

A course covering the fundamentals of all phases of carpentry. Included in the topics to be studied are: hand tools, use of framing square, laying out, cutting joints, framing and remodeling. The student will spend a large amount of time in practical application working with hand tools.

COAST GUARD NAVIGATIONAL AIDS FIS 3730

24 Hrs.

A course to teach proper and safe handling of all types of small boats. Subjects included are safety afloat, seamanship aid to navigation, charts and piloting, mariner's compass, government regulations, and rules of the water.

DATA PROCESSING, INTRODUCTION EDP 3510

30 Hrs.

A course designed to introduce the student to basic terminology, concepts and principles of business data processing and programming. Emphasis will be placed on basic ideas the student should master in preparation for learning a programming language.

DRAFTING I DFT 3780

60 Hrs.

An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, single-stroke lettering, applied geometry and freehand sketching consisting of orthographic and pictorial drawings.

ELECTRIC MOTOR REPAIR PME 3865

60 Hrs.

A course covering windings of starters, turning of commutators, replacing of bearings, replacing and repair of switches, wiring of motors, replacing of brushes, replacing safety switches, commutator testing, check for shorts and grounds and balancing rotors and armatures.

ENGINE REBUILDING (GASOLINE) AUT 3713

60 Hrs.

A course stressing the construction and operation of components of internal combustion engines; testing of engine performance; servicing and maintenance of pistons, valves, cams, camshafts, oil pumps; fueling, lubrication, exhaust and

electrical systems. The student will practice testing for problems before the engines are serviced to enable him to diagnose problems before overhaul.

FARMSTEAD WIRING ELC 3635

36 Hrs.

A course designed for the Vocational Agriculture instructor and provides instruction in insuring that the wiring will be suitable for future additions; that the wiring will be safe and in accordance with the National Electrical Code requirements; and that it will be permanent and neat in appearance. It includes planning and installation of electrical wiring to meet the requirements of the modern day farmer who depends upon electrical power to operate his farm.

FIRST AID, ADVANCED FIP 3302

12 Hrs.

The Advanced American Red Cross First Aid Course. It deals with field practice of first aid for the student. It is designed to qualify each student for the Advanced Red Cross First Aid Card.

FIRST AID, STANDARD FIP 3301

12 Hrs.

A course taught by an American Red Cross approved instructor and open to anyone interested in learning how to care for the injured. Among the topics covered are: bandage application, use of tourniquets and temporary splints, care of eye and burn injuries, safe usage and storage of medicines and artificial respiration.

FRONT END ALIGNMENT & WHEEL BALANCING AUT 3711

42 Hrs.

The theory and practice of front end alignment and balancing techniques of wheels and tires. Stressing the importance of a completely balanced system as related to efficient and economical operation of the automobile.

GAS AND OIL BURNER SERVICING MEC 3660

42 Hrs.

Instruction for servicemen, steam fitters, sheet metal men and others in the construction and operation of various types of heating equipment, such as high pressure oil burners; installation of conversion burners, servicing of nozzles, electrodes and pumps, and basic controls and circuits.

GASOLINE ENGINE REPAIR, SMALL PME 3860

60 Hrs.

A course teaching preventative maintenance, troubleshooting and repair of two-and four-cycle one-cylinder gasoline engines and their power train-auxiliary engines used in industry and elsewhere.

GROUND SCHOOL FOR PILOTS AER 3890

45 Hrs.

A course including all necessary flight preparatory information, including flight theory, aircraft performance, air traffic rules, radio navigation, flight planning, weather interpretation, and radio communication precedures. Upon completion of the course, students should be prepared to complete successfully the F.A.A. Private Pilot written examination which will be offered.

HUMAN RELATIONS MDP 3019

18-20 Hrs.

Presenting the fundamental principles of good supervisor-employee relations and

concrete elements which simplify and clarify the complicated subject of human reactions. Material presented has been drawn from the work experiences of successful supervisors who have recognized and practiced the principles of good human relations.

LANDSCAPING AGR 3170

42 Hrs.

A course to help the student understand the importance of basic planning in developing the landscape, lawn and shrubbery arrangement. Instruction during the quarter will cover planting, fertilizing, pruning, and care of ornamental plants.

MECHANICS, FARM AGR 3131

60 Hrs.

A basic course offered in conjunction with the Vocational Agriculture Departments in the county for adult farmers and homeowners interested in the broad areas of mechanics. Among the topics covered are carpentry, welding, electricity, plumbing, gasoline engines, electric motors and farm machinery. Each student will be able to spend a certain amount of time in the area of his choice.

NATIONAL ELECTRIC CODE ELC 3769

30 Hrs.

A course based on the National Electric Code, designed to prepare the experienced electrician for a licensing examination. The course will review the basic principles of electricity and offers a thorough study of the National Electric Code and the North Carolina regulations governing electrical work.

N. C. UNIFORM RESIDENTIAL BUILDING CODE ELC 3766 24 Hrs.

A lecture and discussion course pertaining to articles I, II and III of the North Carolina Uniform (Minimum) Residential Building Code. The North Carolina Uniform Residential Building Code pamphlet will be the text.

NURSES AIDE NUR 3370

90 Hrs.

A course designed to enable the nurses aide to play her part in the health team by assisting the professional nurse in giving bedside care to selected patients. The student is taught to give bedside care by lecture, demonstration, and supervised practice in the nursing laboratory.

OPERATING ROOM TECHNIQUES HEA 3391

42 Hrs.

A course designed to give the nurse a general idea of the physical setup of an operating room and its equipment. The students will acquire skills and thoughtfulness in the care of patients in the operating room and be able to understand the more common types of operative procedures and their relation to the patient's safety and progress.

OUTBOARD MOTOR REPAIR FIS 3017

60 Hrs.

A basic course dealing with the fundamentals of outboard motors. Students will be taught the basic parts of the motor, maintenance practices, and simple repairs. This class will deal only with outboard motors.

PARLIAMENTARY PROCEDURES SDT 3790

12 Hrs.

A course in Robert's Rules of Order to assist people in becoming more

familiar with parliamentary procedure. Designed especially for those persons who are responsible for conducting group meetings.

PLUMBING, BASIC PLU 3890

60 Hrs.

Instruction for those having no previous training in plumbing practice, nor special knowledge of the requirements, but who wish to plan, install and maintain simple plumbing systems in accordance with good practice. Included in the topics covered are closets, traps, vents, sewers, valves, faucets, pipe fittings, pipe (cutting and threading), and roughing in a complete plumbing system.

PRINCIPLES OF SUPERVISION MDP 3018

48 Hrs.

Discussion in depth of the principles of organization and management. Practical approaches to business needs of planning, directing, organizing, coordinating and controlling are stressed. Students explore in detail the supervisor's responsibility for differentiating jobs, delegating authority, planning, decision-making, and improving his personal efficiency.

RADIO & TV REPAIR, ADVANCED ELN 3641

60 Hrs.

The second in a series of two courses for the servicing and repair of domestic radio and television receivers. Students enrolling in this course should have completed Basic Radio & TV Repair or have an adequate background in basic electronics. Students will divide their time between classroom study and laboratory work.

RADIO & TV REPAIR, BASIC ELN 3640

60 Hrs.

The first course in a series of two courses to train qualified repairmen for radios, black and white televisions, and color televisions. Instruction will begin with basic electronics and proceed through resistors, capacitors, coils, tubes, and solid-state devices.

REFRIGERATION, INTRODUCTION TO

60 Hrs.

A course to teach terminology, laws of refrigeration, absolute pressure and temperature, energy conversion units, specific and latent heat, refrigeration cycle, tools, and methods applicable to the refrigeration.

RESIDENTIAL WIRING I ELC 3760

60 Hrs.

Instruction and application in the fundamentals of blueprint reading, planning, layout and installation of wiring in residential applications, such as services, switch boards, lighting, fusing, wire sizes, branch circuits, conduits and National Electrical Code regulation in actual buildings.

SURVEYING I DFT 3785

60 Hrs.

A study of basic instrumentation and topography. Students will be exposed to surveying through lecture, demonstration, and practical application. Material to be covered will be profile leveling, cross sections, earthwork computations, transit stadia and transit-tape surveys.

TRACTOR MAINTENANCE AGR 3130

30 Hrs.

Covered in this course are battery maintenance, cranking, motor service, troubleshooting, generator regulator system, Auto-Lite and Delco-Remy regulators; generator service, ignition testing; switches, principles of hydraulic pumps,

hydraulic pumps, valves, cylinders, seals and packing, hydraulic system troubles, transmissions and hydraulic fluids.

UPHOLSTERY UPH 3890

60 Hrs.

A course designed to help beginning students understand the basic principles of upholstering, and to give them opportunities to upholster a simple home furnishing. Automotive upholstery will be covered in this course also.

WELDING, BASIC AGR 3139

60 Hrs.

A course concentrating on the use of AC and DC welding equipment. Welding heats, polarities and electrodes in joining various metals, together with practice in running various welding beads. Safety procedures are emphasized throughout the course in the use of tools and equipment. The student will also acquire practice in using the oxyacetylene torch for cutting, welding and brazing.

TRAINING FOR NEW AND EXPANDING INDUSTRIES

One of the basic objectives of Robeson Technical Institute is to stimulate the creation of more challenging and rewarding jobs for the people of our area by providing a customized training service to new and expanding industries. Subject to only minimal limitations, this institution, in cooperation with the Industrial Services Division of the State Department of Community Colleges, will design and administer a special program for training the production manpower required by any new or expanding industry creating new job opportunities in North Carolina.

This program includes the following services:

1. Consultation in determining job descriptions; defining areas of training; and in prescribing appropriate course outlines, training schedules, and materials.
2. Selecting and training of instructors. These instructors may be recruited from the company and from outside sources.
3. Payment of instructors' wages for the duration of the training program.
4. Provision of suitable space for a temporary training facility prior to the completion of the new plant, should such temporary space be required. This may be space with Robeson Technical Institute or leased space in the community.
5. Assumption of installation cost of equipment in the temporary training facility.
6. Payment of one-half the cost of nonsalvageable materials expended in the training program.

The purpose of this service is to help a new or expanding industry meet its immediate manpower needs and to encourage each industry to develop a long-range training program of its own to satisfy its continuing replacement and retaining needs.

For further details of this service, please contact the President, Robeson Technical Institute, or the Director, Industrial Services Division, North Carolina Department of Community Colleges, Raleigh, North Carolina.

ROBESON TECHNICAL INSTITUTE
Drawer A

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